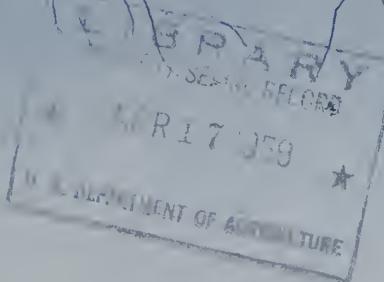


Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.

1.96
R31Fend
Cop. 2

Here, on Mt. Rose, Nevada, Dr. J. E. Church made
the first western snow survey 50 years ago.



FEDERAL - STATE - PRIVATE COOPERATIVE
SNOW SURVEY and WATER SUPPLY FORECASTS
for
NEVADA

UNITED STATES DEPARTMENT of AGRICULTURE - SOIL CONSERVATION SERVICE,
and
NEVADA STATE ENGINEER

Information contained in this report was obtained by the agencies named above
in cooperation with Federal, State and private organizations listed
on the last page of this report.

AS OF
APR. 1, 1959

UNITED STATES DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE

TO RECIPIENTS OF COOPERATIVE SNOW SURVEY AND WATER SUPPLY FORECAST REPORTS:

The climate of the cultivated and populated areas of the West is characterized by relatively dry summer months. Such precipitation as occurs falls mostly in the winter and early spring months when it is of little immediate benefit to growing crops. Fortunately, most of this precipitation falls as mountain snow which stays on the ground for months, melting later to sustain streamflow during the period of greatest demand during late spring and summer. Thus, nature provides in mountain snow an imposing water storage facility.

The amount of water stored in mountain snow varies from place to place as well as from year to year and accordingly, so does the runoff of the streams. The best seasonal management of variable western water supplies results from fore-knowledge of the runoff.

A snow survey consists of a series of about ten samples taken with specially designed snow sampling equipment along a permanently marked line, about 1000 feet in length, called a snow course. The use of snow sampling equipment provides snow depth and water equivalent values for each sampling point. The average of these values is reported as the snow survey measurement for a snow course.

Snow surveys are made monthly or semi-monthly beginning in January or February and continue through the snow season until April, May or June. Currently more than 1300 western snow courses are measured each year. These measurements furnish the key data for water supply forecasts.

By relating snow survey measurements taken over a period of years to spring-summer runoff during the same period, relationships have been developed which make it possible to forecast seasonal runoff several months in advance of occurrence. In order to make a forecast, once a forecast relationship has been developed, the maximum snow water content at previously selected key snow courses is usually entered in the forecast relationship. More accurate forecasts are often obtained when other factors such as soil moisture, base flow and spring precipitation are considered and included in the forecast relationships.

Listed below are the Federal-State-Private Cooperative Snow Survey and Water Supply Forecast reports available for the West which contain detailed information on snow survey measurements, streamflow forecasts, reservoir storage, soil moisture and other guide data to water management and conservation decisions.

PUBLISHED BY SOIL CONSERVATION SERVICE

REPORTS	ISSUED	COOPERATING WITH	LOCATION
RIVER BASINS			
COLORADO, RIO GRANDE AND ARKANSAS	MONTHLY (FEB.-MAY)	COLO. EXP. STATION, COLO. STATE ENGINEER, NEW MEXICO STATE ENGINEER	FT. COLLINS, COLO.
COLUMBIA <i>Includes Alaska</i>	MONTHLY (JAN.-MAY)	IDAHO STATE ENGINEER	BOISE, IDAHO
UPPER MISSOURI	MONTHLY (FEB.-MAY)	MONT. AGR. EXP. STATION	BOZEMAN, MONTANA
WEST-WILOE	(OCT. 1, APR. 1 AND MAY 1)	COOPERATORS	PORLTANO, OREGON

STATES

ARIZONA	SEMI-MONTHLY (JAN. 15-APR. 1)	SALT R. VALLEY WATER USERS ASSOCIATION	PHOENIX, ARIZONA
NEVADA	MONTHLY (FEB.-APR.)	NEVADA STATE ENGINEER	RENO, NEVADA
OREGON	MONTHLY (JAN.-MAY)	ORE. AGR. EXP. STATION	PORLTANO, OREGON
UTAH	MONTHLY (JAN.-MAY)	UTAH STATE ENGINEER	UTAH AGR. EXP. STATION
WASHINGTON	MONTHLY (FEB.-MAY)	WASH. STATE DEPT.	OF CONSERVATION
WYOMING	MONTHLY (FEB.-JUNE)	WYOMING STATE ENGINEER	CASPER, WYOMING

Copies of the various reports may be secured from: Head, Water Supply Forecasting Section
Soil Conservation Service
209 S.W. 5th Avenue, Portland 4, Oregon

PUBLISHED BY OTHER AGENCIES

OTHER SNOW SURVEY REPORTS

BRITISH COLUMBIA	MONTHLY (FEB.-JUNE)	COMPTROLLER, WATER RIGHTS BR., DEPT. OF LANDS AND FORESTS, PARLIAMENT BLDGS. VICTORIA, B.C.
CALIFORNIA	MONTHLY (FEB.-MAY)	CALIFORNIA DEPARTMENT OF WATER RESOURCES, SACRAMENTO, CALIFORNIA

FEDERAL - STATE COOPERATIVE
SNOW SURVEYS AND WATER SUPPLY FORECASTS

For

N E V A D A

Report Prepared

By

Norman S. Hall
and
Roy E. Malsor, Jr.

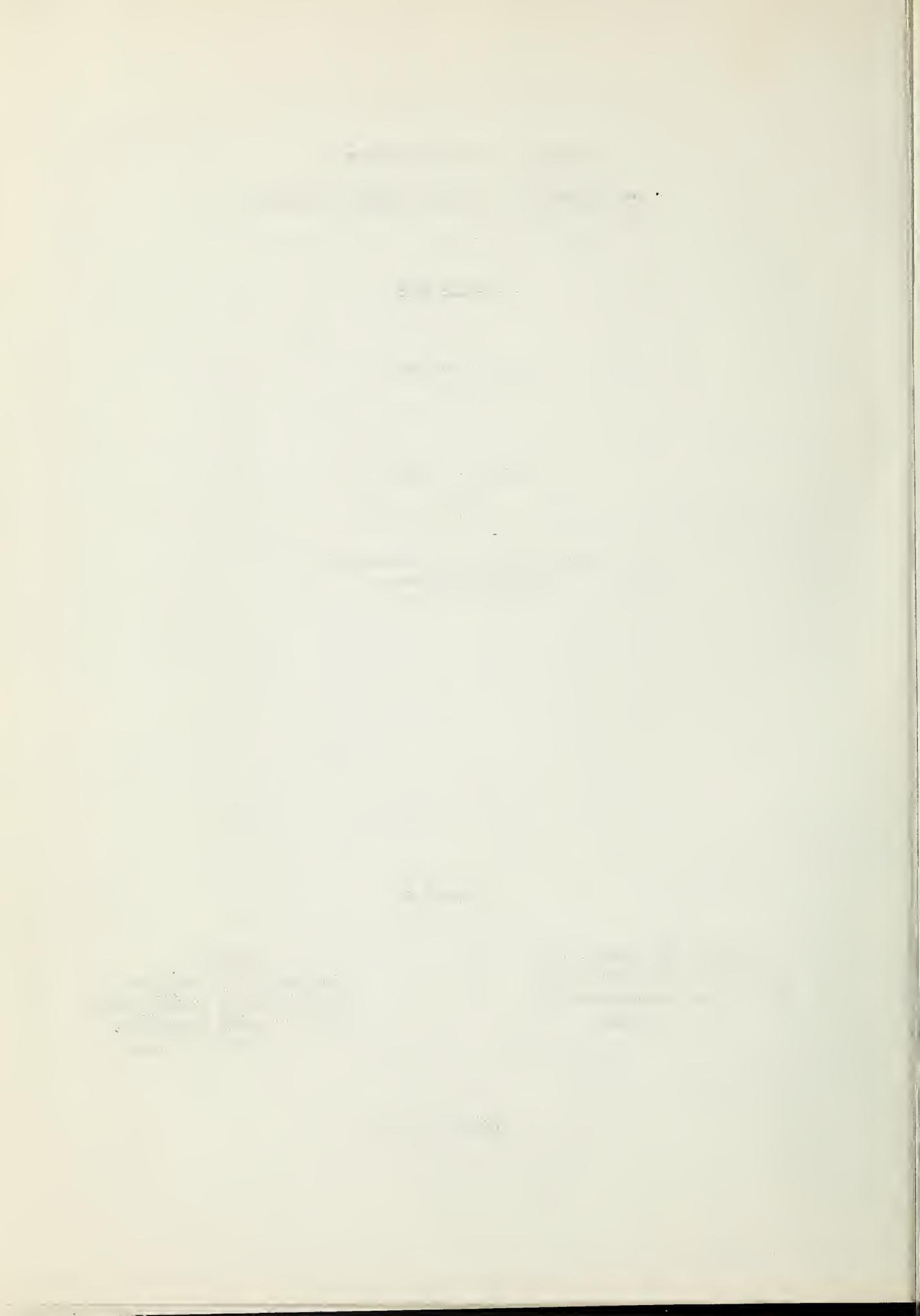
Soil Conservation Service
1479 Wells Avenue
Reno, Nevada

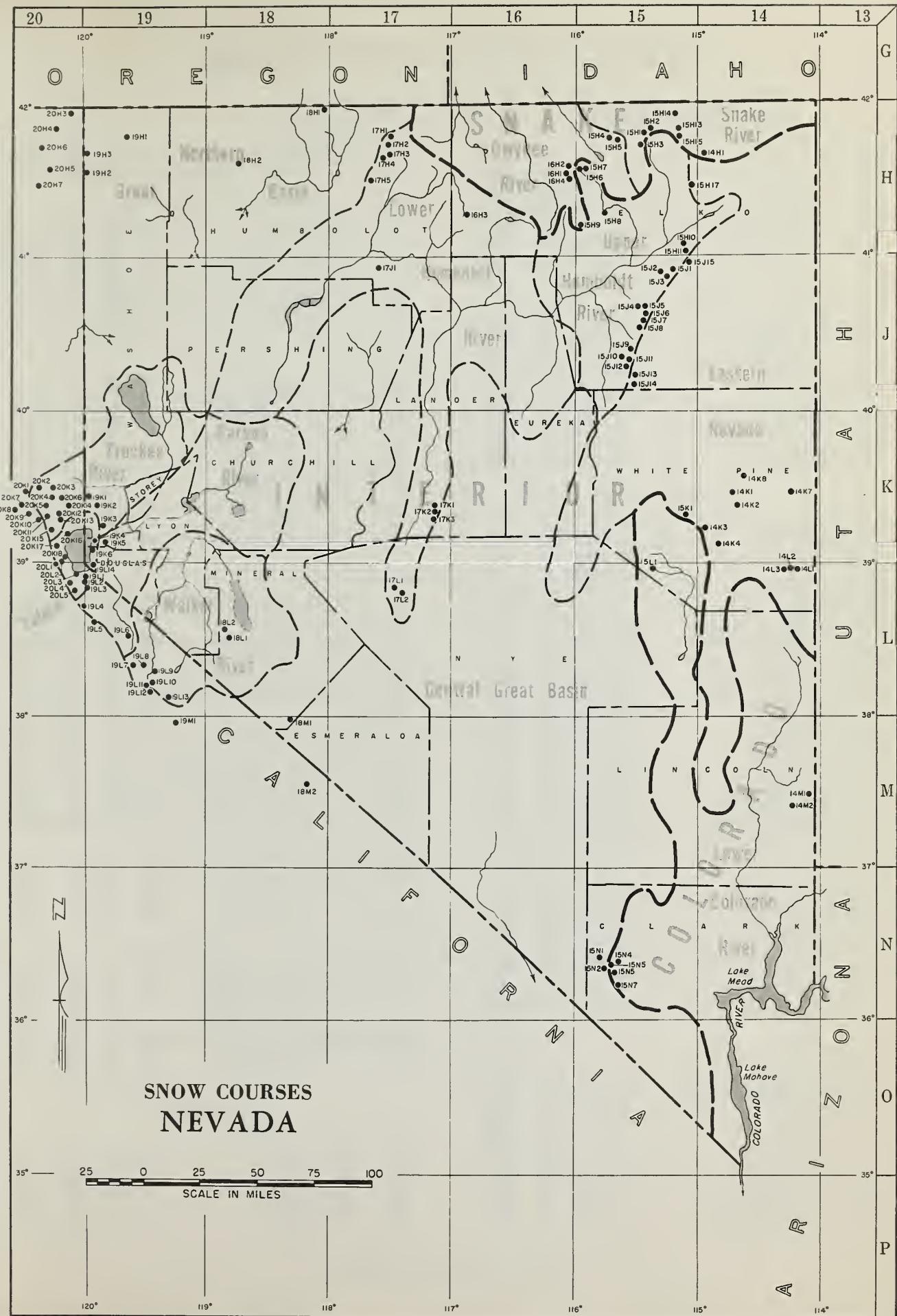
Issued By

Charles W. Cleary, Jr.
State Conservationist
Soil Conservation Service
Reno, Nevada

Ed Muth
Nevada State Engineer
Department of Conservation
and Natural Resources
Carson City, Nevada

April 1, 1959



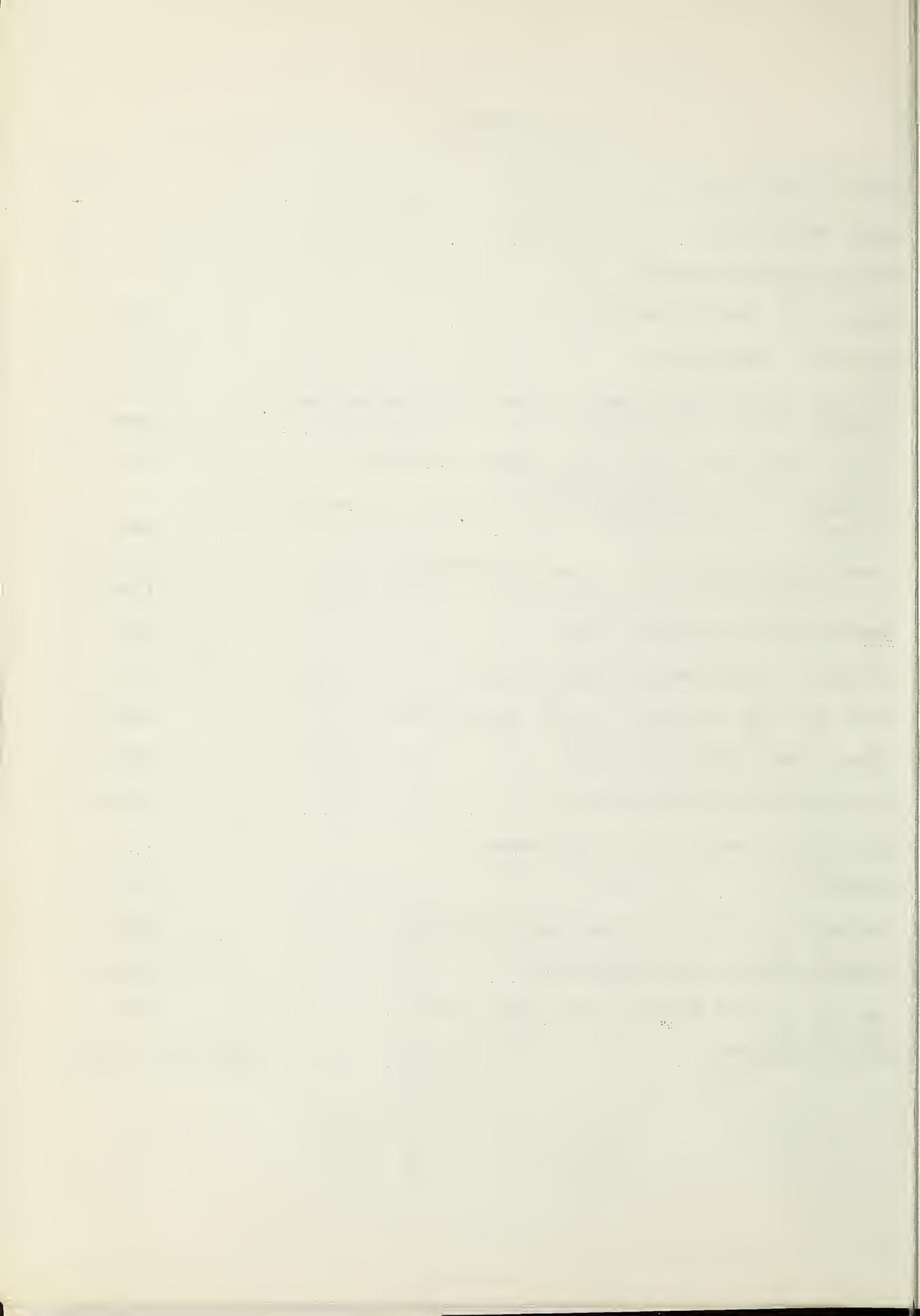


INDEX to NEVADA SNOW COURSES

NUMBER	NAME	SEC.	TWP.	RGE.	ELEV.	NUMBER	NAME	SEC.	TWP.	RGE.	ELEV.						
SNAKE RIVER BASIN																	
SNAKE RIVER						15N 2	CLARK CANYON	8	19S	56E	9000						
1SH 1	BEAR CREEK	31	46N	58E	7800	15N 1	TROUGH SPRINGS	23	18S	55E	8500						
1SH 2	FOX CREEK	33	46N	58E	6800	18M 1	MONTGOMERY PASS	4	1N	33E	7100						
1SH 3	76 CREEK	6	44N	58E	7100	18M 2	CAMPITO MTN	19	5S	35E	10200						
1SH 5*	GOLO CREEK	31	45N	56E	6600	NORTHERN GREAT BASIN											
1SH 4*	BIG BEND	30	45N	56E	6700	19H 1	BALO MOUNTAIN	17	45N	21E	6720						
1SH13	GOAT CREEK	31	46N	60E	8800	18H 1	DISASTER PEAK	8	47N	34E	6500						
1SH14	POLE CREEK RANGER STATION	13	46N	59E	8330	18H 2	LEONARO CREEK	13	42N	28E	5900						
1SH15	HUMMINGBIRD SPRINGS	6	45N	60E	8945	19H 3	49-MTN	7	42N	19E	6000						
14H 1	JAKES CREEK	6	42N	62E	7000	19H 2	HAYS CANYON	1	39N	18E	6400						
OWYHEE RIVER																	
17H 2*	LOWER BUCKSKIN	25	45N	39E	6700	20H 4	RESERVATION CREEK	12	46N	15E	5900						
17H 1*	UPPER BUCKSKIN	11	45N	39E	7200	20H 3	DISMAL SWAMP	31	48N	16E	7000						
17H 3*	MARTIN CREEK	18	44N	40E	6700	20H 7	EAGLE PEAK	35	40N	15E	8300						
17H 4*	GRANITE PEAK	22	44N	39E	7800	LAKE TAHOE											
1SH 5	GOLO CREEK	31	45N	56E	6600	20L 4	(CAL.) LAKE LUCILLE	28	12N	17E	8400						
1SH 4	BIG BENO	30	45N	56E	6700	20L 1	(CAL.) RUBICON #1	6	13N	17E	8100						
1SH 7*	FRY CANYON	31	43N	54E	6700	19L 3	(CAL.) HAGANS MEAOOW	36	12N	18E	8000						
1SH 6*	ROOEO FLAT	36	43N	53E	6800	19L 2	(CAL.) FREEBENCH	36	12N	18E	7300						
16H 1	LOWER JACK CREEK	18	42N	53E	6800	20K17	(CAL.) WARO CREEK	21	15N	16E	7000						
16H 2	UPPER JACK CREEK	9	42N	53E	7250	19L 1	(CAL.) UPPER TRUCKEE	21	12N	18E	6400						
15H 8*	TREMewan RANCH	9	39N	55E	5700	20K16	(CAL.) TAHOE CITY	6	15N	17E	6250						
15H 9	TAYLOR CANYON	35	39N	53E	6200	20L 2	(CAL.) RUBICON #2	6	13N	17E	7500						
16H 4	JACKS PEAK	28	42N	53E	8420	20K18	(CAL.) RUBICON#3	32	14N	17E	6700						
INTERIOR																	
UPPER HUMBOLDT RIVER																	
1SH 1*	BEAR CREEK	31	46N	58E	7800	20L 3	(CAL.) RICHARSONS #2	6	12N	18E	6500						
1SH 2*	FOX CREEK	33	46N	58E	6800	20L 5	(CAL.) ECHO SUMMIT	6	11N	18E	7500						
15H 3*	76 CREEK	6	44N	58E	7100	19K 4	MARLETTE LAKE	13	15N	18E	8000						
15H 5*	GOLO CREEK	31	45N	56E	6600	19L14	DAGGETTS PASS	19	13N	19E	7350						
15H 4*	BIG BENO	30	45N	56E	6700	19K 6	GLENBROOK #2	13	14N	18E	6900						
15H 7	FRY CANYON	31	43N	54E	6700	19K 2*	MT. ROSE	7	17N	19E	9000						
15H 6	ROOEO FLAT	36	43N	53E	6800	TRUCKEE RIVER											
16H 1*	LOWER JACK CREEK	18	42N	53E	6800	20K 5	(CAL.) INOEPENOENCE LAKE	9	18N	15E	8450						
16H 2*	UPPER JACK CREEK	9	42N	53E	7250	20K 1*	(CAL.) WEBBER PEAK	30	19N	14E	8000						
15H 8	TREMewan RANCH	9	39N	55E	5700	20K10*	(CAL.) DONNER SUMMIT	25	17N	14E	6900						
15H 9*	TAYLOR CANYON	35	39N	53E	6200	20K17*	(CAL.) WARO CREEK	21	15N	16E	7000						
15H10	LOWER TROUT CREEK	28	37N	61E	6900	20K 2	(CAL.) WEBBER LAKE	20	19N	14E	7000						
15H11	UPPER TROUT CREEK	4	36N	61E	8500	20K 6	(CAL.) SAGE HEN CREEK	7	18N	16E	6500						
15J 1	DORSEY BASIN	28	35N	60E	8100	20K16*	(CAL.) TAHOE CITY	6	15N	17E	6250						
15J 2	RYAN RANCH	1	34N	59E	5800	20K13	(CAL.) TRUCKEE #2	22	17N	16E	6400						
15J 3	DRY CREEK	5	34N	60E	6500	20K 3	(CAL.) INDEPENDENCE CREEK	14	19N	15E	6500						
15J 4	LAMOILLE #1	15	32N	58E	7100	20K14	(CAL.) BOCA #2	28	18N	17E	5900						
15J 5	LAMOILLE #2	14	32N	58E	7300	20K 7*	(CAL.) FORDYCE LAKE	34	18N	13E	6500						
15J 6	LAMOILLE #3	24	32N	58E	7700	20K 9*	(CAL.) SOA SPRINGS	23	17N	14E	6750						
15J 7	LAMOILLE #4	19	32N	59E	8000	20K 4	(CAL.) INOEPENOENCE CAMP	34	19N	15E	7000						
15J 8	LAMOILLE #5	31	32N	59E	8700	19K 2	MT. ROSE	7	17N	19E	9000						
15J 9	GREEN MOUNTAIN	23	29N	57E	8000	20K12	(CAL.) TRUCKEE RANGER STA.	10	17N	16E	6000						
15J10	HARRISON PASS #1	9	28N	57E	6600	20K11	(CAL.) DONNER LAKE	14	17N	15E	5950						
15J11	HARRISON PASS #2	16	28N	57E	7400	19K 1	BIG MEADOWS	15	18N	18E	8800						
15J12	CORRAL CANYON	27	28N	57E	8500	19K 3	LITTLE VALLEY	17	16N	19E	6300						
20K15	(CAL.) SOUAW VALLEY	6	15N	16E	7500	CARSON RIVER											
LOWER HUMBOLDT RIVER																	
17H 2	LOWER BUCKSKIN	25	45N	39E	6700	19L 4	(CAL.) CARSON PASS	22	10N	18E	8600						
17H 1	UPPER BUCKSKIN	11	45N	39E	7200	19L 6	(CAL.) POISON FLAT	25	8N	21E	7900						
17H 3	MARTIN CREEK	18	44N	40E	6700	19L 5	(CAL.) BLUE LAKES	30	9N	19E	8000						
17H 4	GRANITE PEAK	22	44N	39E	7800	19K 5	CLEAR CREEK	16	14N	19E	7300						
17H 5	LAMANCE CREEK	13	42N	38E	6000	WALKER RIVER											
16H 3	MIOAS	18	39N	46E	7200	19L12	(CAL.) CENTER MOUNTAIN	4	3N	23E	9400						
17K 1	BIG CREEK CAMP GROUND	10	17N	43E	6600	19L 7	(CAL.) SONORA PASS	1	5N	21E	8800						
17K 2	BIG CREEK MINE	23	17N	43E	7600	19L11	(CAL.) BUCKEYE FORKS	20	4N	23E	8500						
17K 3	UPPER BIG CREEK	26	17N	43E	8000	19L13	(CAL.) VIRGINIA LAKES	5	2N	25E	9500						
17L 1	LOWER CORRAL	12	11N	40E	7500	19L 9	(CAL.) WILLOW FLAT	21	5N	23E	8260						
17L 2	UPPER CORRAL	20	11N	41E	8500	19L10	(CAL.) BUCKEYE ROUGHS	15	4N	23E	7900						
17J 1	GOLCONDA	22	35N	39E	6000	19L 8	(CAL.) LEAVITT MEAOOWS	4	5N	22E	7200						
EASTERN NEVADA																	
15J15	HOLE-IN-MTN	6	35N	61E	7900	19M 1*	(CAL.) TIoga PASS	30	1N	25E	9900						
15J13	CAVE CREEK	25	27N	57E	7500	18L 1	LAPON MEAOOW	36	8N	28E	9000						
15J14	HAGER CANYON	34	27N	57E	8000	18L 2	MT. GRANT	23	8N	28E	9000						
14K 3	MURRAY SUMMIT	25	16N	62E	7250	COLORADO											
14L 1	BAKER #1	29	13N	69E	7950	LOWER COLORADO RIVER											
14L 2	BAKER #2	30	13N	69E	8950	15N 5	KYLE CANYON	26	19S	56E	8200						
14L 3	BAKER #3	25	13N	68E	9250	15N 4	LEE CANYON #1	10	19S	56E	8300						
14K 2	BERRY CREEK	26	17N	65E	9100	15N 3	LEE CANYON #2	9	19S	56E	9000						
14K 1	BIRO CREEK	34	19N	65E	7500	15N 7	RAINBOW CANYON #2	6	20S	57E	8100						
15K 1	ROBINSON SUMMIT	34	18N	61E	7600	14M 1	MATHEW CANYON	11	5S	70E	6000						
14K 4	WARO MOUNTAIN	25	15N	62E	7875	14M 2	PINE CANYON	11	6S	69E	6200						
14K 7	SILVER CREEK #2	30	16N	69E	8000	15L 1	WHITE RIVER #1	31	13	59E	7400						
14K 8	KALAMAZOO CREEK	34	20N	65E	7400												
15L 1*	WHITE RIVER #1	31	13N	59E	7400												

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WATER SUPPLY OUTLOOK
FOR NEVADA

April 1, 1959

* * * * *

* Prospects for extremely low flows face Nevada *

* water users. Limited, but adequate supplies *

* for those who have reservoir storage rights and *

* critically low flows for those who must depend *

* on natural flow. In general, watershed soils *

* are very dry and will hold a large portion of *

* snow stored water.

* * * * *

April 1 forecasts range from 65% of normal flow on the Carson River to 18% of normal on the Owyhee River and a low of 12% of normal on the Humboldt River.

During the April-July runoff period, below normal flows are also expected in western Nevada. On the Truckee-Tahoe system, the Truckee Basin Water Committee is forecasting a flow of 40,000 acre feet or 50% of the 1938-52 normal on the Little Truckee above Boca. On the Truckee at Farad, the forecast is for 118,000 acre feet or 42% of the 1938-52 normal. On April 1, the elevation of Lake Tahoe was 6227.63 feet above sea level. The rise of Lake Tahoe, from April 1, is expected to be 0.70 feet or 44% of the 1938-52 normal rise. All forecasts are based on the assumption of normal temperature and precipitation during the forecast period.

On the Carson River, forecasts range from 65% at Gardnerville to 43% at Fort Churchill of the April-July 1938-52 normals.

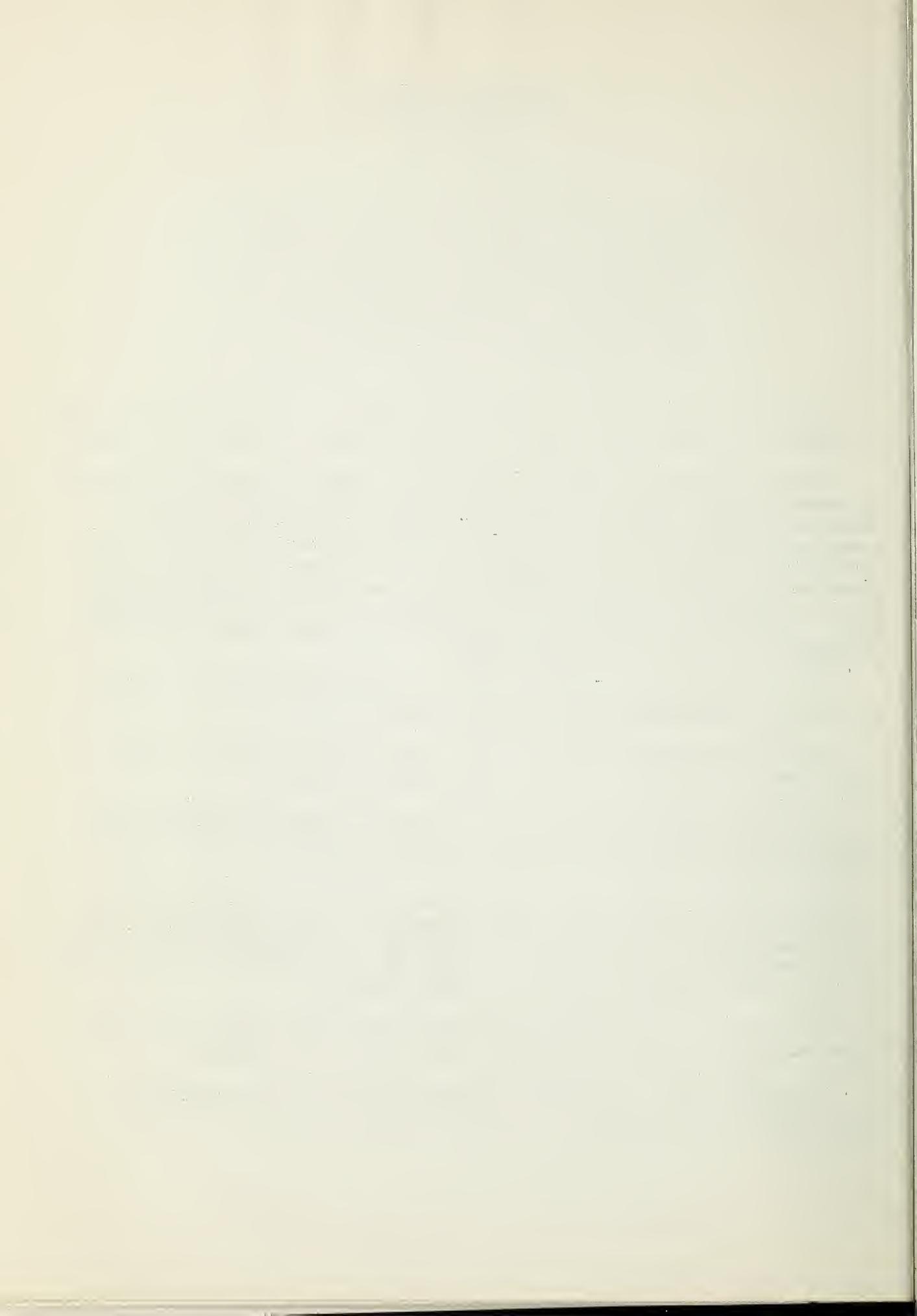
The East Walker at Bridgeport is expected to flow 41%, while the West Walker near Coleville will flow 62% of the 1938-52 normals.

In southern Nevada, the snow pack in the Spring Mountains is 46% of the April 1938-52 normal. White Pine has about 50% of normal snow pack at high elevation courses, while low elevation courses are bare.

Elko County is faced with a critical water shortage. The Owyhee near Gold Creek is forecasted at only 18% of normal and downstream at Owyhee flows of 23% are expected. Lamoille Creek is expected to flow 53% during April-July and the South Fork of the Humboldt will flow 26%. The Humboldt at Palisade will only flow about 12% of the April-July 1938-52 normal.

The snow pack in the Santa Rosa Mountains north of Paradise Valley indicates that Martin Creek will flow about 56% of the 1938-52 normal.

Nearly full reservoirs assure adequate, but limited, water supplies for those who have storage rights. Statewide reservoirs are 78% of capacity or 120% of the April 1 normal.



NEVADA STREAMFLOW FORECASTS - APRIL 1, 1959

The following summarized runoff forecasts are based principally on mountain snow cover and the assumption that precipitation and temperature will be near average from the present time to the end of the forecast period. Appreciable deviations from normal of temperature and/or precipitation will correspondingly modify these forecasts.

Forecast Stream	April-July, Streamflow Thousands Acre Feet					
	Forecast 1959	15-Yr Av. 1938-52	1959 as % of 15-Yr. Av.		Measured 1958	Runoff 1957
			18	37		
Owyhee River nr. Gold Creek, Nev. ¹	5	28			37	28
Owyhee River nr. Owyhee, Nev. ¹	20	88	23		110	102
Lamoille Creek nr. Lamoille, Nev.	16	30	53		29	34
So. Fk. Humboldt nr. Elko, Nev.	22	84	26		77	78
Humboldt River at Palisade, Nev.	30	249	12		228	247
Martin Creek nr. Paradise, Nev.	10	18	56		30	21
East Walker nr. Bridgeport, Cal. ²	30	73	41		125	48
West Walker nr. Coleville, Cal.	100	160	62		218	128
East Carson nr. Gardnerville, Nev.	126	195	65		276	162
West Carson at Woodfords, Cal.	35	55	64		84	50
Carson River nr. Carson City	112	192	58		298	148
Carson River at Ft. Churchill	81	189	43		274	159
Little Truckee River above Boca, California ⁵	40	80	50		169	71
Truckee River at Farad, Cal. ^{3,5}	118	279	42		456	206
Lake Tahoe ^{4,5}	0.70	1.6	44		2.58	1.4
Salmon Falls Creek nr. San Jacinto, Nevada	50*	92	54		87	104

1. Corrected for storage in Wild Horse Reservoir.
2. For period April through August corrected for storage in Bridgeport Reservoir.
3. Exclusive of Tahoe and corrected for storage in Boca Reservoir.
4. Maximum rise, in feet, from April 1, assuming gates closed.
5. Forecast issued by Truckee Basin Water Committee which is composed of Truckee-Carson Irrigation District, Sierra Pacific Power Company and Washoe County Water Conservation District.

* Forecast period of March-September.



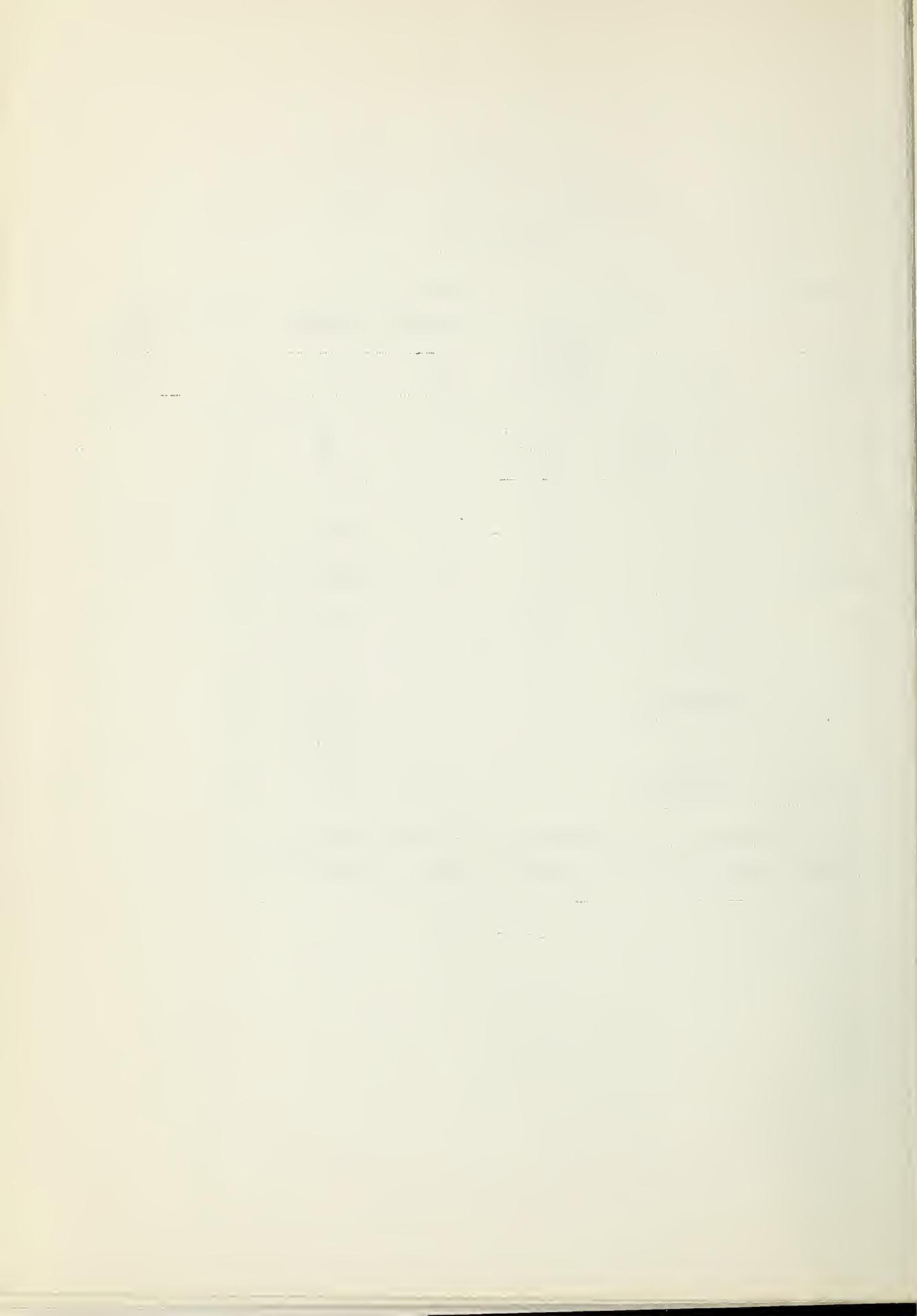
NEVADA

STATUS OF RESERVOIR STORAGE

APRIL 1, 1959

BASIN AND STREAM	RESERVOIR	USABLE CAPACITY (1000 AF)	USABLE STORAGE - 1000 ACRE FEET			
			1959	1958	1957	APRIL 1 15-YR. AVE. 1938-52
Owyhee	Wild Horse	33	23	22	30	14
Lower Humboldt	Rye Patch	179	123	100	63	100
Colorado	Mohave	1,810	1,703	1,738	1,690	New Reservoir*
Colorado	Mead	27,217	20,735	19,092	11,502	18,153
Tahoe	Tahoe	732	563	630	598	446
Truckee	Boca	41	2	7	22	13
Carson	Lahontan	286	254	234	252	233
West Walker	Topaz	59	57	38	59	44
East Walker	Bridgeport	42	43	37	42	35

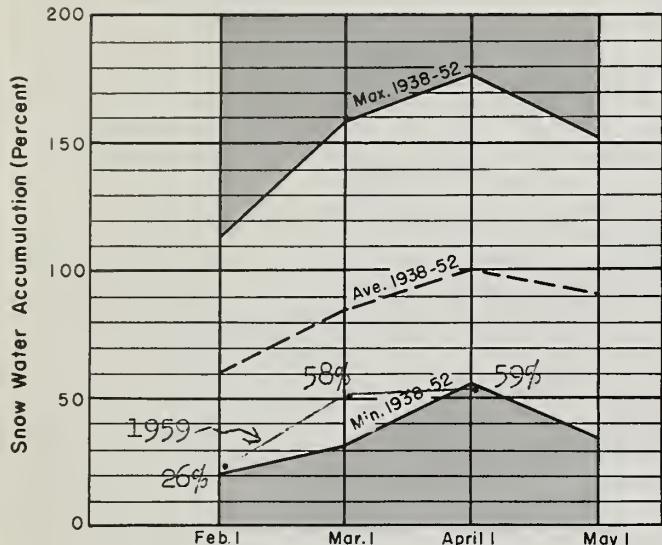
* Storage began in 1950. The 1950-58 average is 1,519,000 acre feet.



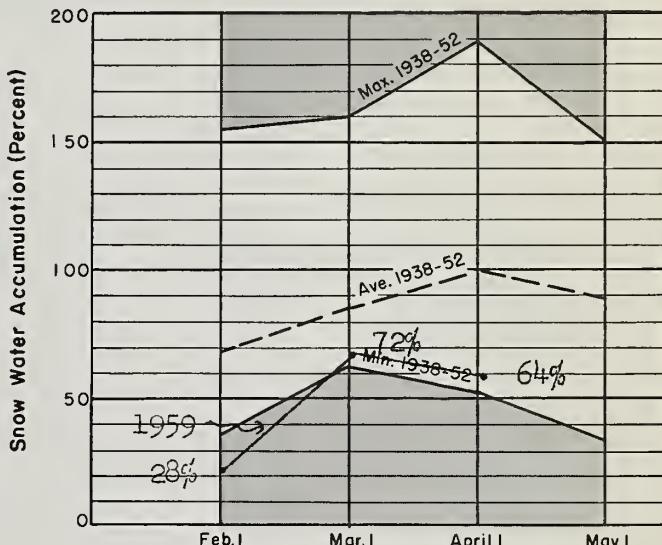
SNOW WATER ACCUMULATION in NEVADA by BASIN

APRIL 1, 1959

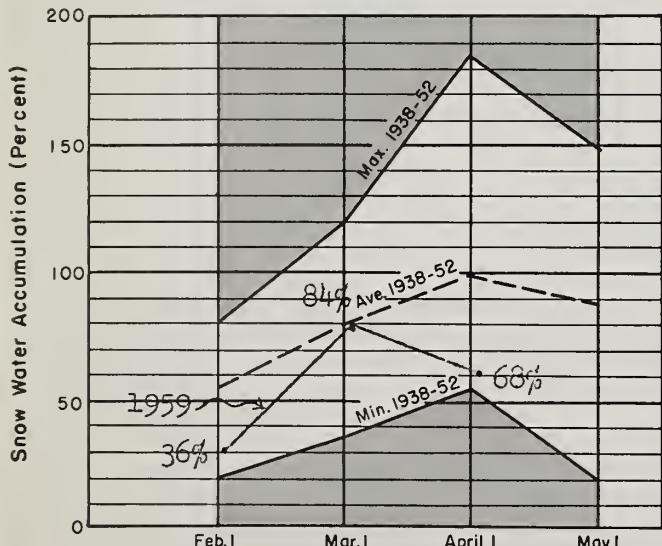
TAHOE BASIN



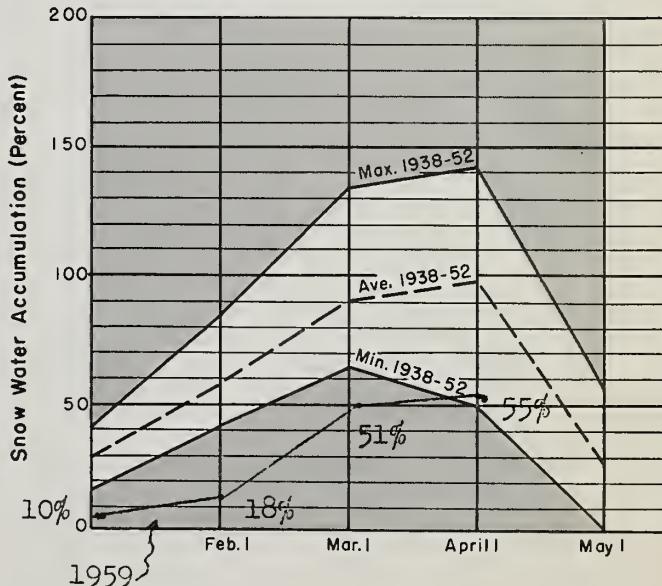
WALKER RIVER BASIN

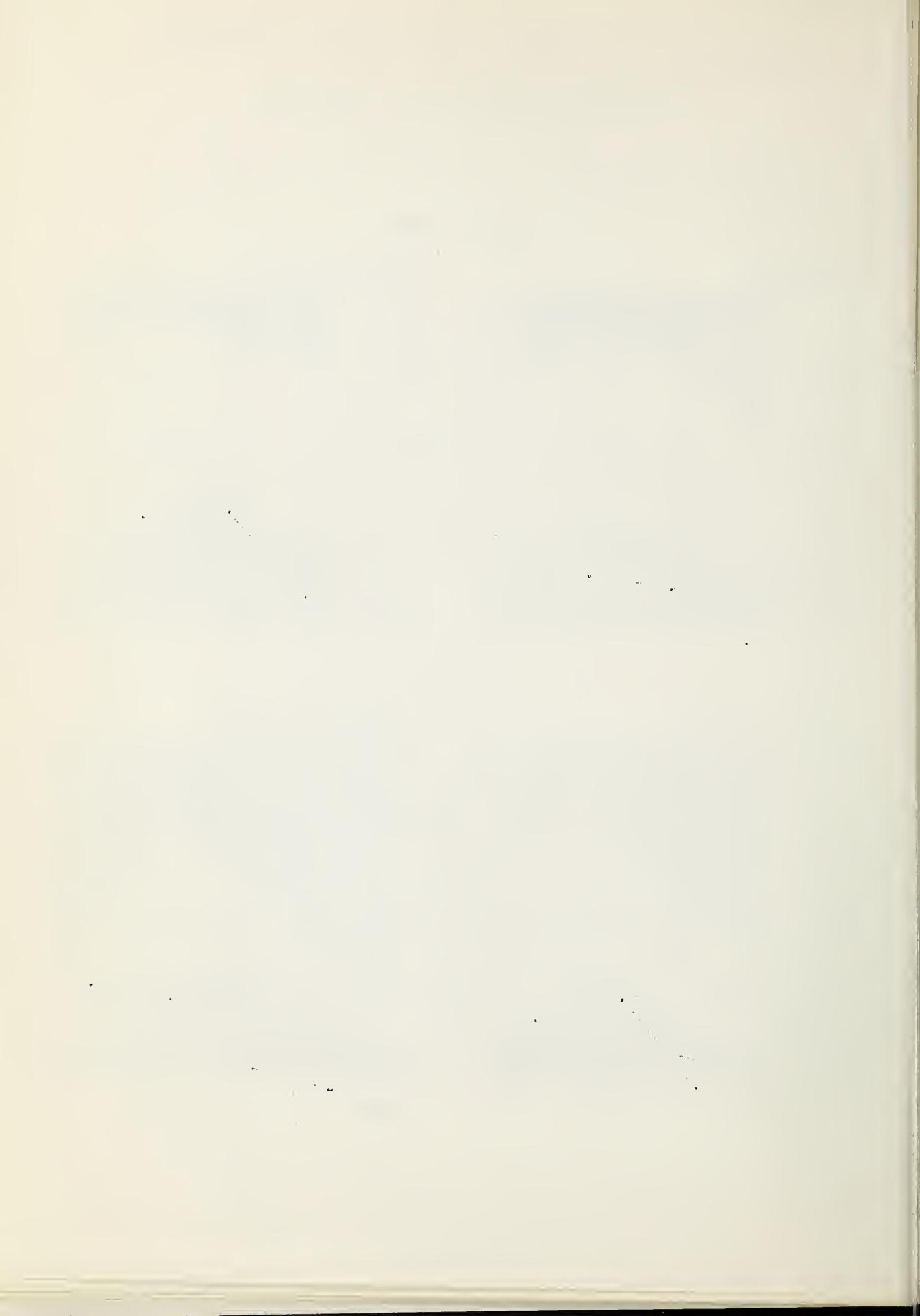


CARSON RIVER BASIN



HUMBOLDT RIVER BASIN

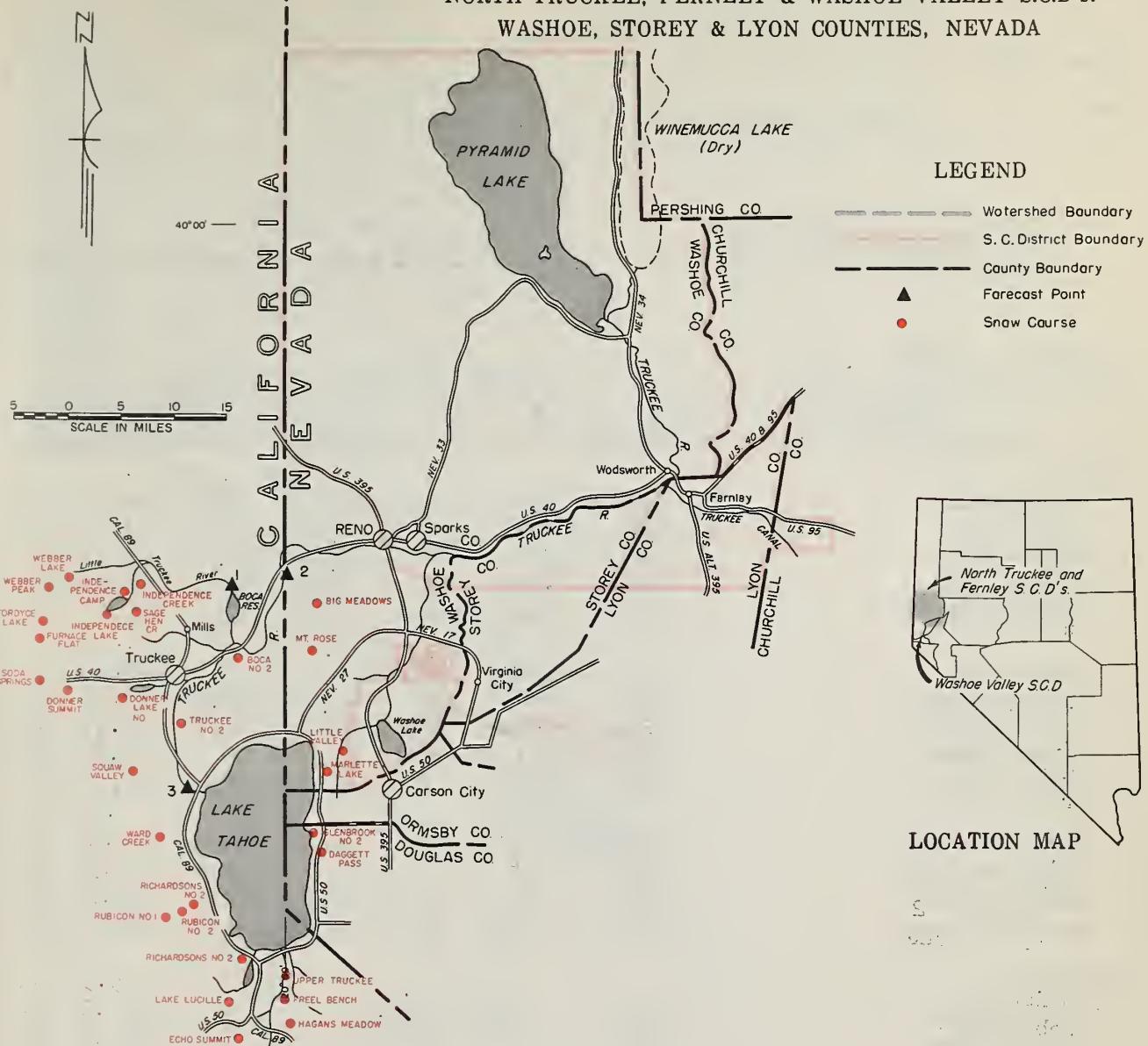




SNOW SURVEY & WATER SUPPLY FORECAST

NORTH TRUCKEE, FERNLEY & WASHOE VALLEY S.C.D.'s.

WASHOE, STOREY & LYON COUNTIES, NEVADA



APRIL 1, 1959

Water supply in the Tahoe-Truckee Basin will be adequate.

On April 1 the elevation of Lake Tahoe was 6227.63 feet above sea level. According to the Truckee Basin Water Committee the rise of Lake Tahoe is expected to be 0.70 foot from April 1 through the runoff period. Present usable storage in the Lake is 563,000 acre feet or 77 percent of capacity.

The Truckee River at Farad is forecast to flow 118,000 acre feet or 42 percent of the 1938-52 normal for the April 1 through July 31 period. The Little Truckee above Boca, is forecast to flow 40,000 acre feet or 50 percent of the 1938-52 normal.

Based on the foregoing forecast there will be a full supply of irrigation water for 1959, but a reduced supply for power generation in the winter season of 1959-60.

STORAGE (1,000 Ac. Ft.)

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	NORMAL
Lake Tahoe	732	563	630	446
Boca	41	2	7	13

NOTE: All normsols based on 1938-1952 15 year period. "Years of record" indicates number of years used in 1938 - 1952 period. The forecast period is from April 1 through July 31.

APRIL - JULY RUNOFF (1,000 Ac. Ft.)

FORECAST POINT	FORECAST	MEASURED	
	THIS YEAR	LAST YEAR	NORMAL
1. Little Truckee R. above Boca, Calif.	40	169	80
2. Truckee River at Farad, Calif.	118	456	279
3. Lake Tahoe rise (in feet from Apr. 1 assuming gates closed)	0.70	2.58	1.6
Note: Above forecasts prepared by Truckee Basin Water Committee.			

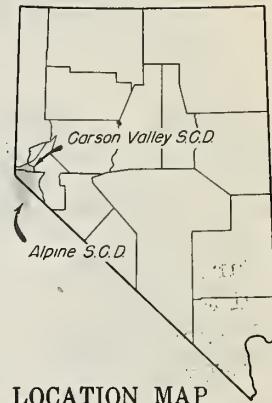
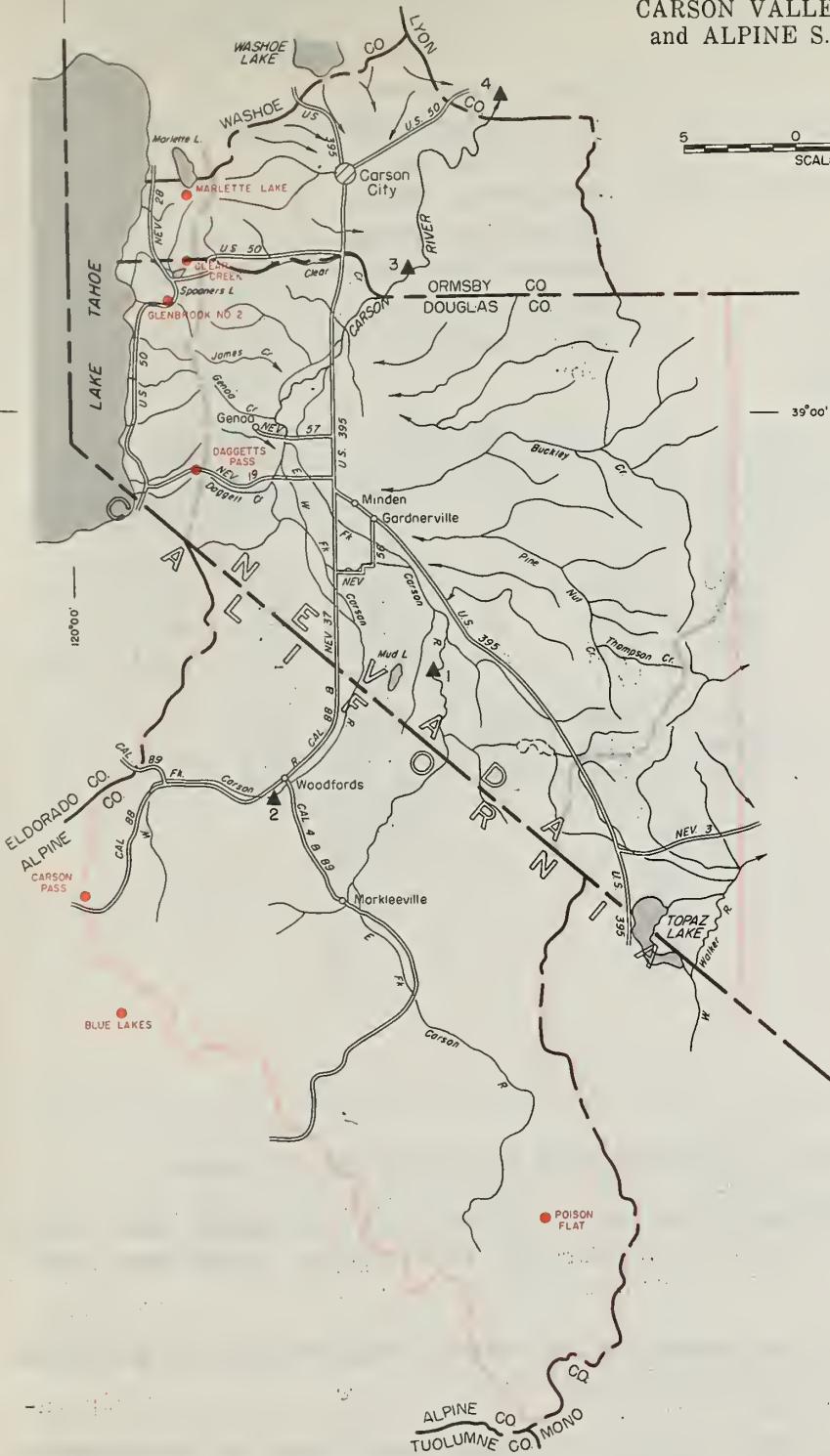
SNOW APRIL 1, 1959

SNOW COURSE	NAME	ELEVATION	CURRENT INFORMATION			PAST RECORD		YEARS OF RECORD
			DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)	LAST YEAR	
TAHOE								
Lake Lucille		8400	3/25	104	39.1	88.6	64.5	15
Tahoe City		6250	3/27	T	T	17.8	13.6	15
Ward Creek		7000	4/1	66	28.4	74.7	49.5	15
Rubicon #1		8100	3/26	95	32.7	69.8	48.0	15
Rubicon #2		7500	3/26	44	17.9	51.6	31.6	15
Rubicon #3		6700	3/26	34	12.6	37.5	21.8	15
Richardsons #2		6500	4/2	25	10.0	23.0	18.6	13
Echo Summit		7500	3/31	58	25.3	50.7	41.3	13
Hagans Meadow		8000	3/31	26	11.3	26.9	19.7	15
Freel Bench		7300	3/31	6	2.2	17.2	11.6	15
Upper Truckee		6400	3/31	2	1.6	14.6	13.6	15
Daggetts Pass		7350	4/2	4	1.9	16.6	14.1	15
Glenbrook #2		6900	4/2	17	6.3	15.9	15.5	11
Marlette Lake		8000	3/30	35	13.7	34.0	25.2	15
TRUCKEE								
Webber Peak		8000		not received		-	45.5	15
Webber Lake		7000		not received		-	36.0	15
Fordyce Lake		6500	4/2	56	25.4	-	42.2	15
Furnace Flat		6600	4/3	63	28.6	-	48.6	15
Independence Lake		8450	4/2	72	29.4	63.2	43.3	15
Independence Camp		7000	4/2	25	10.2	41.3	24.1	12
Independence Creek		6500	4/2	12	5.5	26.8	13.8	15
Sage Hen Creek		6500	4/1	29	12.5	25.2	18.9	15
Soda Springs		6750	3/31	45	21.3	50.6	38.7	15
Donner Summit		6900	3/31	59	25.4	53.0	42.5	15
Donner Lake #1		5950	4/3	20	9.9	42.3	24.3	13
Donner Park #2		6000	4/3	28	12.1	New Course		
Truckee #2		6400	4/1	16	5.7	20.6	14.5	14
Boca #2		5900	4/3	0	0	15.7	5.8	13
Squaw Valley #2		7500	3/27	86	37.0	61.7	-	
Mt. Rose		9000	4/2	56	24.6	40.6	36.4	15

SNOW SURVEY & WATER SUPPLY FORECAST

CARSON VALLEY S.C.D., NEVADA
and ALPINE S.C.D., CALIFORNIA

5 0 5 10
SCALE IN MILES



LOCATION MAP

LEGEND

- Watershed Boundary
- S. C. District Boundary
- County Boundary
- Forecast Point
- Snow Course

APRIL 1, 1959

March was a very dry month in the Carson Watershed. Carson Pass snow course decreased 4 inches in water content. The average increase on this snow course during March is 7.6 inches of water.

Consequently, streamflow forecasts have been reduced about 20 percent from last months forecasts. The East Carson near Gardnerville is forecasted to flow during the April 1-July 31 period 126,000 acre feet or 65 percent of normal. The West

STORAGE (1,000 Ac. Ft.)

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	NORMAL
Lahontan	286	254	234	233

APRIL - JULY RUNOFF (1,000 Ac. Ft.)

FORECAST POINT	FORECAST	MEASURED		
		THIS YEAR	LAST YEAR	NORMAL
1. East Carson near Gardnerville, Nev.	126	276	195	
2. West Carson at Woodfords, Calif.	35	84	55	
3. Carson River near Carson City, Nev.	112	298	192	
4. Carson River at Fort Churchill, Nev.	81	274	189	

NOTE: All normals based on 1938-1952 15 year period. "Years of record" indicates number of years used in 1938 - 1952 period. The forecast period is from April 1 through July 31.

SNOW APRIL 1, 1959

SNOW COURSE	CURRENT INFORMATION			PAST RECORD			YEARS OF RECORD
	NAME	ELEVATION	DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)	
Carson Pass	8600	3/26	66	28.5	59.8	37.6	15
Blue Lakes	8000	3/26	65	23.8	57.4	39.8	15
Poison Flat	7900	3/27	20	9.0	-	16.5	11
Daggetts Pass	7350	4/2	4	1.9	16.6	14.1	15
Glenbrook #2	6900	4/2	17	6.3	15.9	15.5	11
Clear Creek	7300	3/30	18	6.5	26.9	18.1	4
Marlette Lake	8000	3/30	35	13.7	34.0	25.2	15

(Continued from front)

Carson at Woodfords will flow 35,000 acre feet or 64 percent of normal.

Near Carson City, the main Carson River is forecasted to flow 112,000 acre feet or 58 percent of normal flow. At Fort Churchill the flow will be 81,000 acre feet or 43 percent of normal.

These forecasts are based on the assumption of normal temperatures and precipitation during the April-July forecast period.

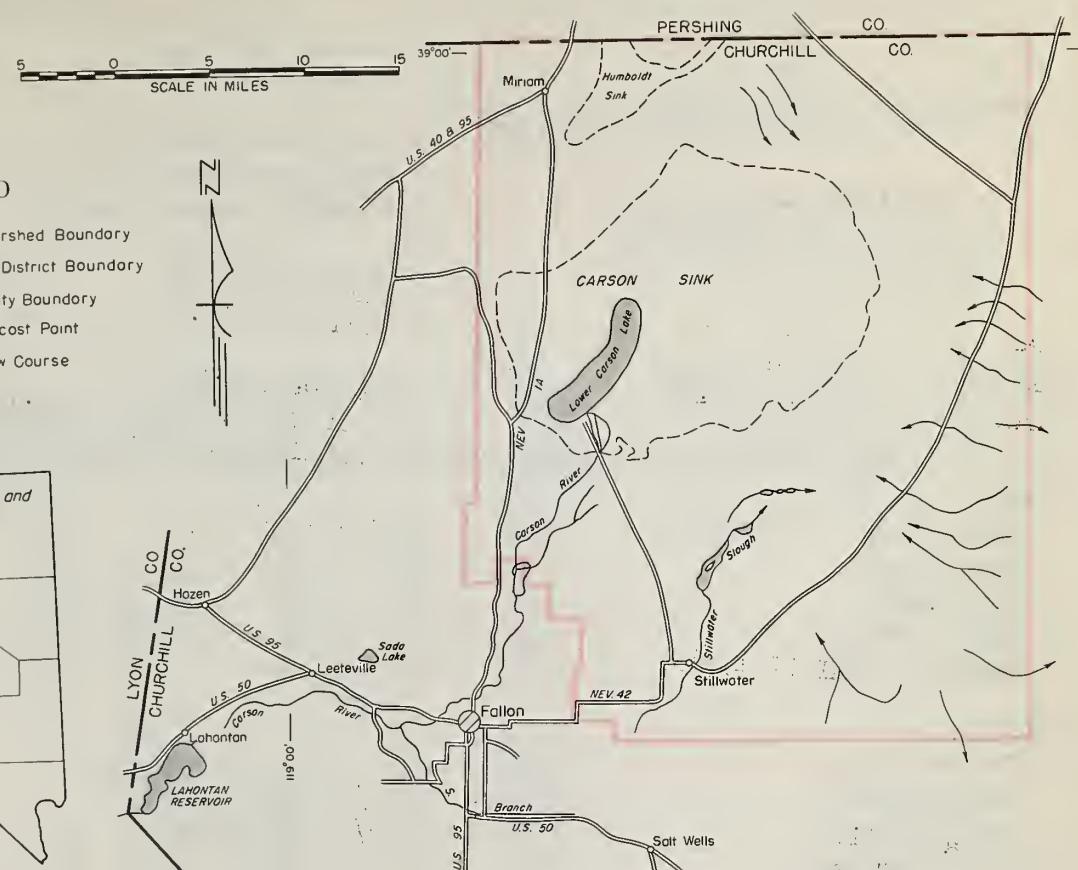
The U. S. Geological Survey reports that the average water level in six observation wells in Carson Valley in March 1959 was 0.22 foot above the average March level for the preceding 10 year period of record and 0.56 foot above the corresponding average of last year.

The East Fork of the Carson River near Gardnerville will probably drop below 200 c.f.s. during the first days of July.

SNOW SURVEY & WATER SUPPLY FORECAST

STILLWATER, SHECKLER, LAHONTAN S.C.D.'S. & VICINITY

CHURCHILL COUNTY, NEVADA



APRIL 1, 1959

Water users in the Fallon area can expect about adequate water this year due to good reservoir storage.

The rise of Lake Tahoe is expected to be 0.70 foot or 44 percent of the 1938-52 normal. The present usable storage is 563,000 acre feet which is slightly less than a year ago.

The Carson River at Fort Churchill is forecast at 81,000 acre feet for the April-July period or 43 percent of the 1938-52 normal.

Lahontan Reservoir usable storage is 254,000 acre feet or 109 percent of normal or 89 percent of capacity.

(Over)

Plate 4

STORAGE (1,000 Ac. Ft.)

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	NORMAL
Lake Tahoe	732	563	630	446
Boca	41	2	7	13
Lahontan	286	254	234	233

NOTE: All normals based on 1938-1952 15 year period. "Years of record" indicates number of years used in 1938 - 1952 period. The forecast period is from April 1 through July 31.

APRIL - JULY RUNOFF (1,000 Ac. Ft.)

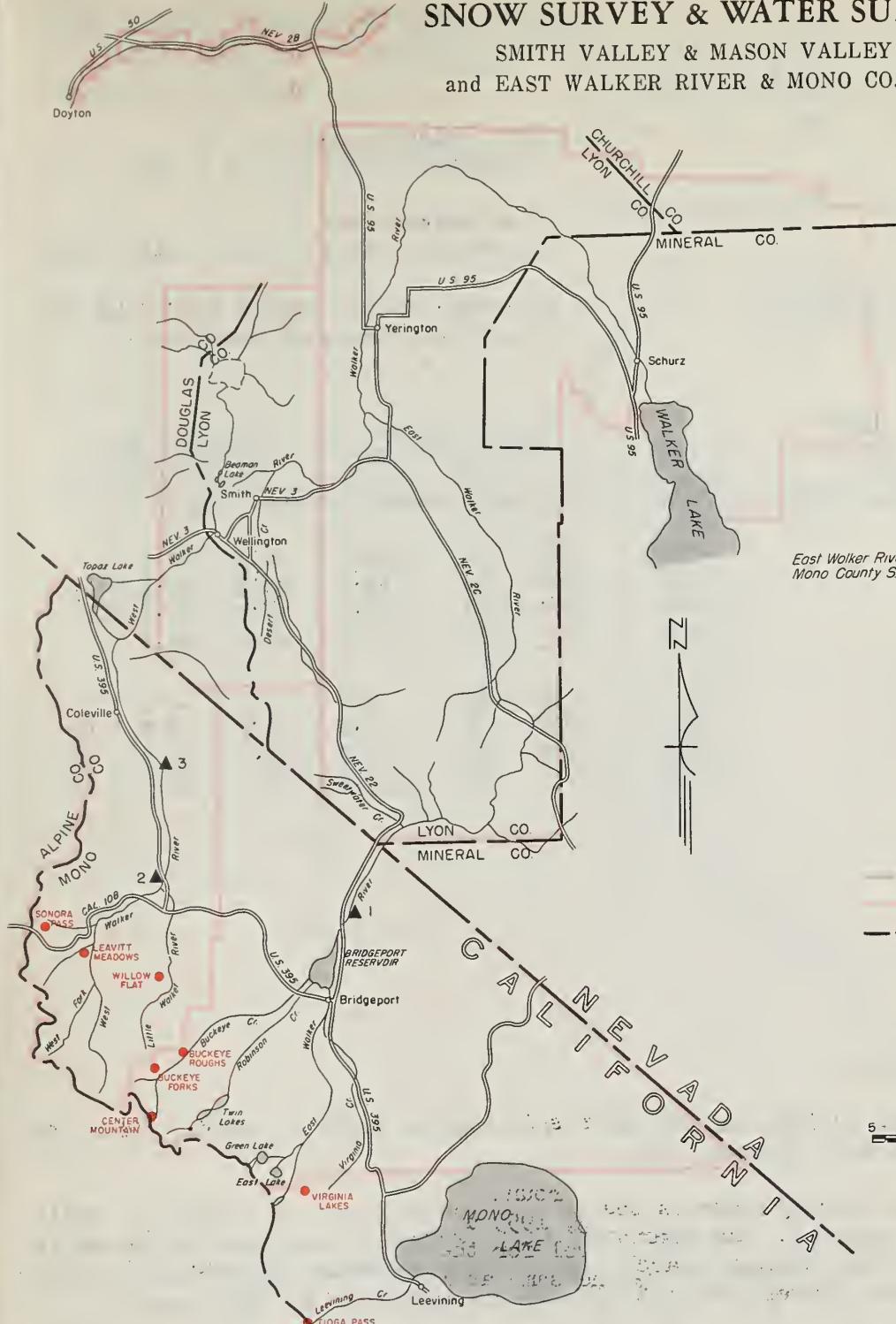
FORECAST POINT	FORECAST			MEASURED		
	THIS YEAR	LAST YEAR	NORMAL	THIS YEAR	LAST YEAR	NORMAL
Truckee River at Farad, Calif.	118	456	279			
Lake Tahoe rise (in feet from April 1, assuming gates closed)	0.70	2.58	1.6			
Carson River at Fort Churchill	81	274	189			

SNOW APRIL 1, 1959

SNOW COURSE	CURRENT INFORMATION			PAST RECORD			YEARS OF RECORD
	NAME	ELEVATION	DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)	
						LAST YEAR	NORMAL
TAHOE							
Tahoe City	6250	3/27	T	T	17.8	13.6	15
Ward Creek	7000	4/1	66	28.4	74.7	49.5	15
Echo Summit	7500	3/31	58	25.3	50.7	41.3	13
Hagans Meadow	8100	3/31	26	11.3	26.9	19.7	15
Daggetts Pass	7350	4/2	4	1.9	16.6	14.1	15
TRUCKEE							
Furnace Flat	6600	4/3	63	28.6	-	48.6	15
Fordyce Lake	6500	4/2	56	25.4	-	42.2	15
Donner Summit	6900	3/31	59	25.4	53.0	42.5	15
Donner Lake #1	5950	4/3	20	9.9	42.3	24.3	13
Independence Camp	7000	4/2	25	10.2	41.3	24.1	12
Sage Hen Creek	6500	4/1	29	12.5	25.2	18.9	15
Boca #2	5900	4/3	0	0	15.7	5.8	13
CARSON RIVER							
Carson Pass	8600	3/26	66	28.5	59.8	37.6	15
Clear Creek	7300	3/30	18	7.2	26.9	18.1	4
Poison Flat	7900	3/27	20	9.0	-	16.5	11
Blue Lakes	8000	3/26	65	23.8	-	39.8	15

SNOW SURVEY & WATER SUPPLY FORECAST

SMITH VALLEY & MASON VALLEY S.C.D.'s., NEVADA
and EAST WALKER RIVER & MONO CO. S.C.D.'s., CALIFORNIA



LOCATION MAP

LEGEND

- Watershed Boundary
- S. C. District Boundary
- County Boundary
- Forecast Point
- Snow Course

5 0 5 10 15
SCALE IN MILES

APRIL 1, 1959

Expected runoff from the Sierras is 41 percent of the 1938-52 normal flow on the East Walker near Bridgeport and 62 percent of normal on the West Walker near Coleville.

During the month of March in the Walker watershed, usually about 15 to 20 percent of the winter's snow pack is deposited. This year no storms occurred during March and the Sonora Pass and Virginia Lakes snow courses decreased about 2 inches in water content. Consequently, this month's forecasts have been revised downward.

Plate 5

(Over)

STORAGE (1,000 Ac. Ft.)

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	NORMAL
Topaz Lake	59	57	38	44
Bridgeport Reservoir	42	43	37	35

NOTE: All normals based on 1938-1952 15 year period. "Years of record" indicates number of years used in 1938 - 1952 period. The forecast period is from April 1 through July 31.

APRIL - JULY RUNOFF (1,000 Ac. Ft.)

FORECAST POINT	FORECAST THIS YEAR	MEASURED	
		LAST YEAR	NORMAL
1. East Walker* near Bridgeport, Calif.	30	125	73
2. West Walker near Coleville, Calif.	100	218	160

* Apr.-Aug. runoff period corrected for change in Bridgeport Reservoir.

SNOW APRIL 1, 1959

SNOW COURSE	NAME	ELEVATION	CURRENT INFORMATION			PAST RECORD		YEARS OF RECORD
			DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)	LAST YEAR	
Virginia Lakes	9500	3/26	32	12.1	22.9	18.3	6	
Buckeye Roughs	7900	3/24	36	13.4	26.8	22.1	15	
Buckeye Forks	8500	3/24	40	13.9	26.3	21.2	14	
Center Mountain	9400	3/25	66	27.3	45.8	40.3	14	
Willow Flat	8250	3/26	15	6.4	17.2	11.3	14	
Leavitt Meadows	7200	3/27	2	1.0	15.5	8.5	15	
Sonora Pass	8800	3/27	38	16.0	33.1	25.3	15	
Tioga Pass	9900	4/1	40	14.4	31.7	26.3	13	

(Continued from front)

Bridgeport Reservoir is full and has been spilling for several weeks. Topaz Lake is within 2000 acre feet of being full.

The U. S. Geological Survey reports that ground water levels in Bridgeport Valley are slightly below average. The March 23, 1959 average of six observation wells was 0.25 foot below the average March level for the preceding 12 years of record. In general, the ground water level is the same as last year at this time.

The April 1 through August 31 flow of the East Walker near Bridgeport is forecasted at 30,000 acre feet or 41 percent of normal. The West Walker is expected to flow 100,000 acre feet or 62 percent of normal.

SNOW SURVEY & WATER SUPPLY FORECAST

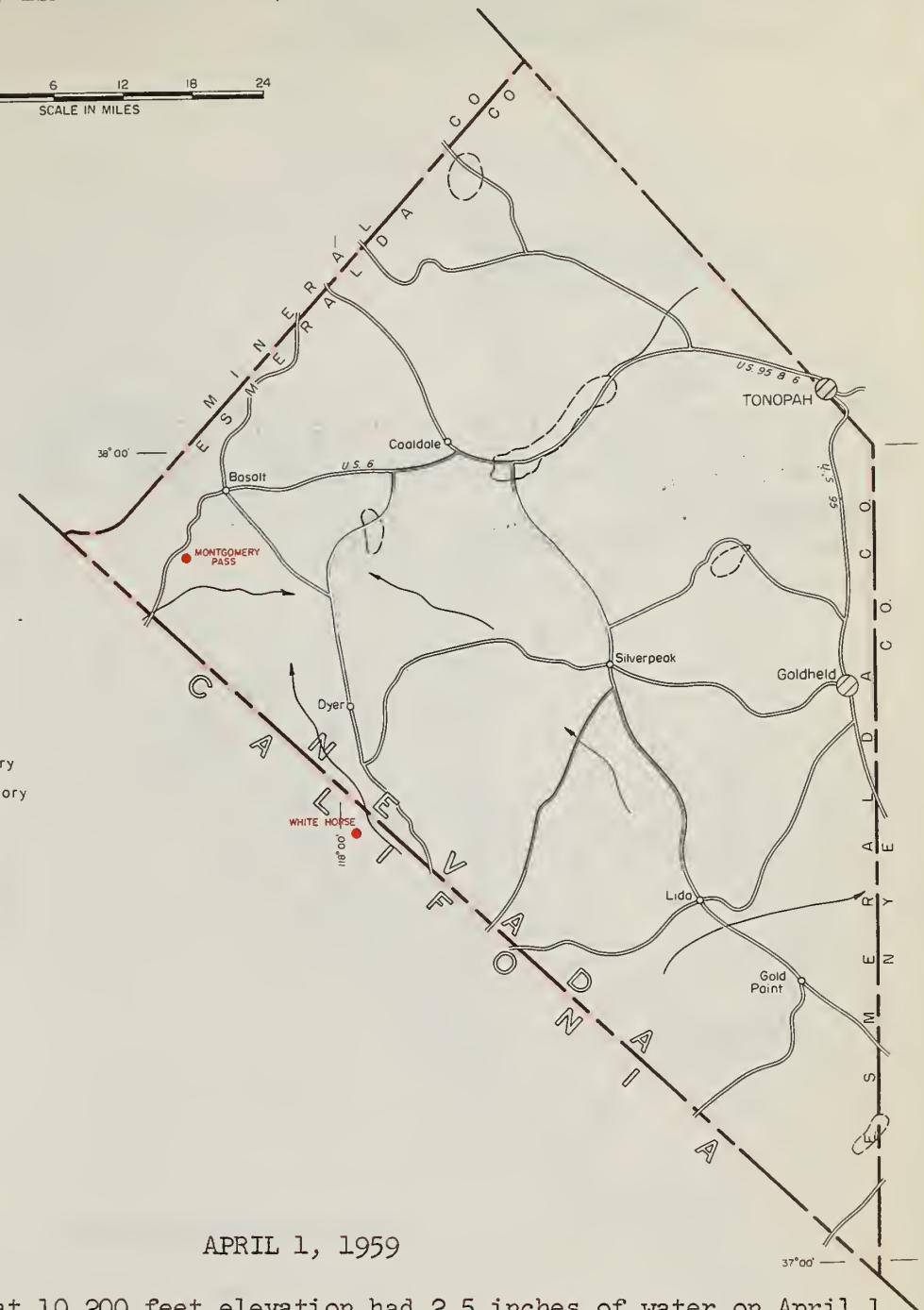
ESMERALDA S.C.D., ESMERALDA COUNTY, NEVADA

6 0 6 12 18 24
SCALE IN MILES



LEGEND

- Watershed Boundary
- S. C. District Boundary
- County Boundary
- Forecast Point
- Snow Course



APRIL 1, 1959

The new snow course at 10,200 feet elevation had 2.5 inches of water on April 1. This is a decrease of 1.3 inches from last month. Hot temperatures and drying winds are rapidly depleting what little snow is remaining. Groundwater recharge for Fish Lake Valley will be almost negligible this year.

For comparison, the precipitation station, White Mtn. #1 is tabulated below. The period November 1 to March 31 is used for comparison.

Year	Nov.	Dec.	Jan.	Feb.	Mar.	Total
1955-56	0.36	6.03	2.79	0.16	.02	9.36
1956-57	T	.07	2.03	1.25	.86	4.21
1957-58	1.22	1.22	1.61	2.05	3.05	9.15
1958-59	0.84	0.07	0.29	3.10	.04	4.34

Mountain soils are reported as very dry and will use most of the snow water. Very low runoff can be expected.

STORAGE (1,000 Ac. Ft.)

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	NORMAL

APRIL - JULY RUNOFF (1,000 Ac. Ft.)

FORECAST POINT	FORECAST		MEASURED	
	THIS YEAR	LAST YEAR	NORMAL	

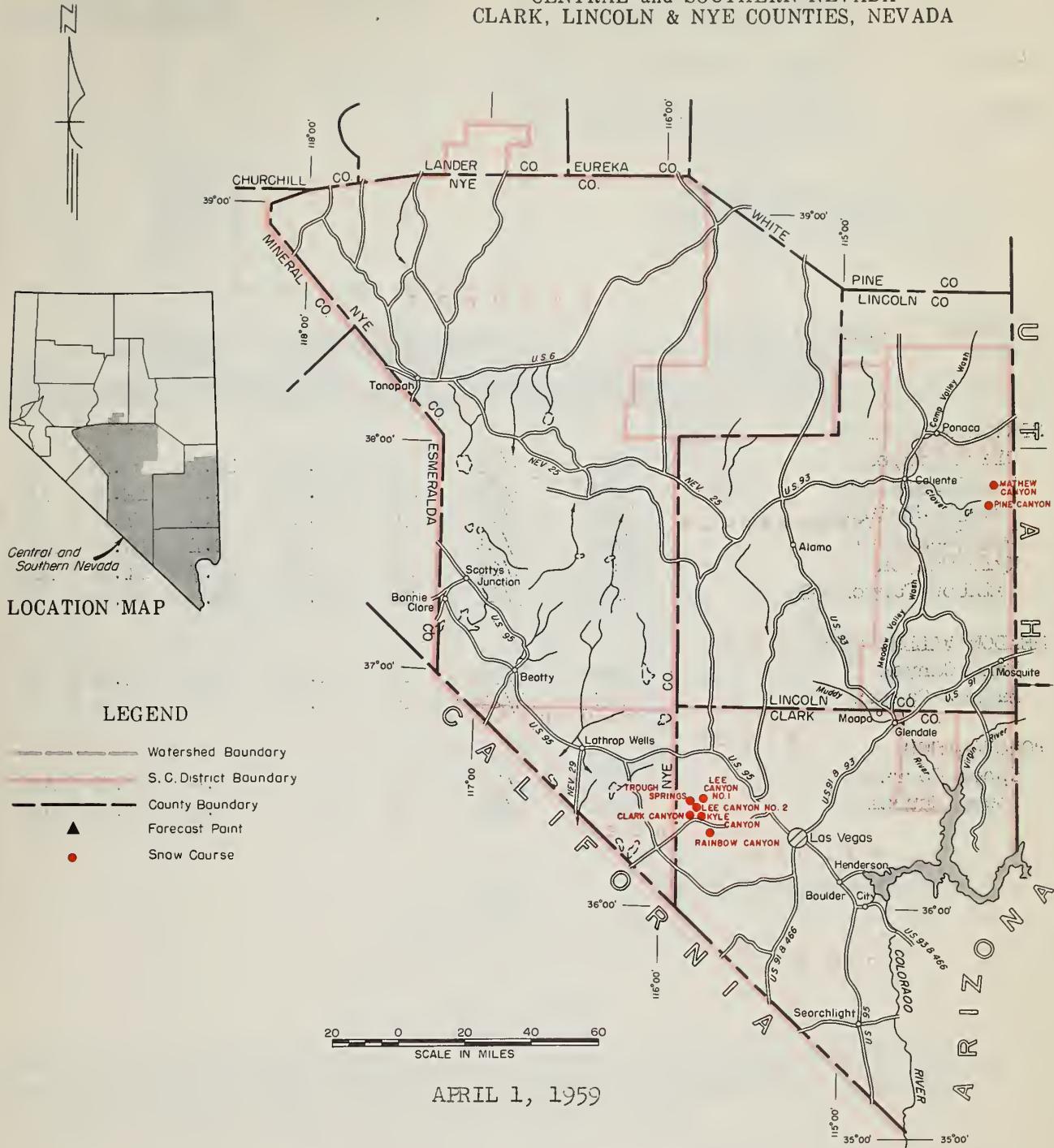
NOTE: All normals based on 1938-1952 15 year period. "Years of record" indicates number of years used in 1938 - 1952 period. The forecast period is from April 1 through July 31.

SNOW APRIL 1, 1959

SNOW COURSE	CURRENT INFORMATION			PAST RECORD		YEARS OF RECORD
	NAME	ELEVATION	DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	
Montgomery Pass	7100	4/1	0	0	New Course	
Campito Mtn. (White Horse)	10200	4/1	8	2.9	New Course	

SNOW SURVEY & WATER SUPPLY FORECAST

CENTRAL and SOUTHERN NEVADA
CLARK, LINCOLN & NYE COUNTIES, NEVADA



In the Spring Mountains near Las Vegas the water content of the snow is only 46 percent of the 1938-52 April 1 normal. Groundwater recharge from the snow-pack will be very slight this year.

Two snow courses were measured on Clover Creek, tributary to Meadow Valley Wash. Pine Canyon snow course measured 1.0 inch of water and Mathew Canyon measured 1.2 inches. The mountain soils are fairly well saturated but spring and summer rains will be needed to provide good range conditions.

In the upper end of the Reese River in northern Ely County, two snow courses reported only a trace of snow. Streamflow in the south end of the Toiyabe Mountains will be very poor this year.

(Over)

STORAGE (1,000 Ac. Ft.)

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	NORMAL
Mohave	1810	1703	1733	1519
Mead	27217	20735	19092	18153

APRIL - JULY RUNOFF (1,000 Ac. Ft.)

FORECAST POINT	FORECAST		MEASURED
	THIS YEAR	LAST YEAR	NORMAL

NOTE: All normals based on 1938-1952 15 year period. "Years of record" indicates number of years used in 1938 - 1952 period. The forecast period is from April 1 through July 31.

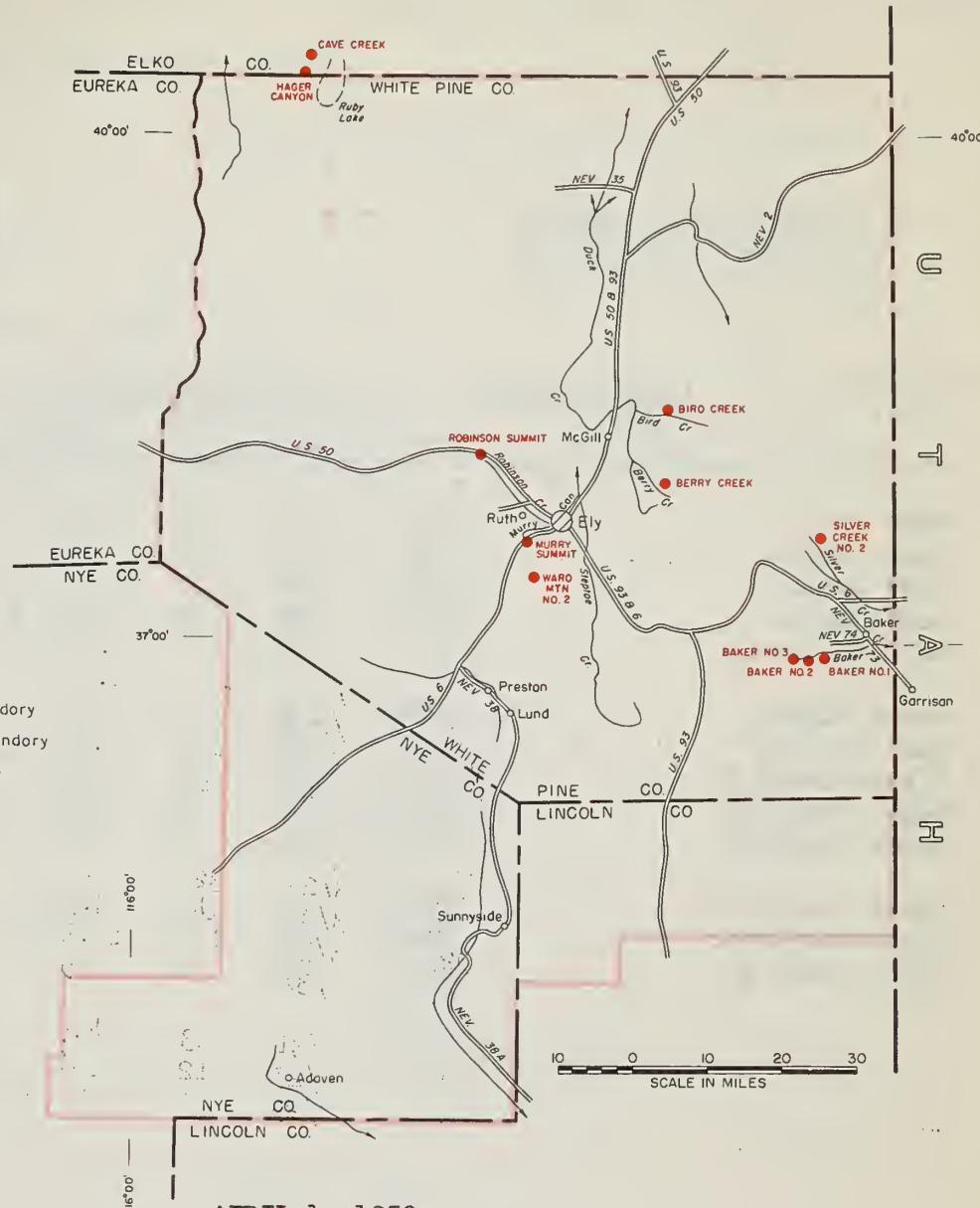
SNOW

April 1, 1959

SNOW COURSE	CURRENT INFORMATION			PAST RECORD		YEARS OF RECORD	
	NAME	ELEVATION	DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)		
SPRING MOUNTAINS							
Clark Canyon	9000	3/29	9	4.7	11.6	9.8	7
Lee Canyon #2	9000	3/29	15	5.4	13.8	12.0	12
Trough Springs	8500	3/27	5	2.2	9.9	7.0	7
Lee Canyon #1	8300	3/21	9	4.3	12.2	10.4	12
Kyle Canyon	8200	3/28	15	5.6	14.7	11.4	12
Rainbow Canyon #2	8100	3/28	32	10.5	24.4	16.8	6
MEADOW VALLEY SCD							
Pine Canyon	6200	3/30	2	1.0	0	1.6	4
Mathew Canyon	6000	3/29	2	1.2	0	0.9	4
TONOPAH SCD							
Upper Corral	8500	3/27	T	T	9.4	5.0	10
Lower Corral	7500	3/27	T	T	1.5	1.7	10

SNOW SURVEY & WATER SUPPLY FORECAST

WHITE PINE S.C.D., WHITE PINE, LINCOLN & NYE COUNTIES, NEVADA



APRIL 1, 1959

Irrigation season water supplies in White Pine Soil Conservation District will be very poor this year. Higher elevation snow courses are about half of normal while lower elevation courses are generally bare of snow.

March storms increased the water content of the snow pack about 2 inches and soil moisture conditions have improved over last month. The soil is wet enough for range grasses to start growing but rainfall must be depended upon to produce any amount of summer grazing.

Ranchers who do not have reservoir storage are faced with low runoff and no late season irrigation water.

(Over)

Plate 8

STORAGE (1,000 Ac. Ft.)

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	NORMAL

APRIL - JULY RUNOFF (1,000 Ac. Ft.)

FORECAST POINT	FORECAST			MEASURED		
	THIS YEAR	LAST YEAR	NORMAL	THIS YEAR	LAST YEAR	NORMAL

NOTE: All normals based on 1938-1952 15 year period. "Years of record" indicates number of years used in 1938 - 1952 period. The forecast period is from April 1 through July 31.

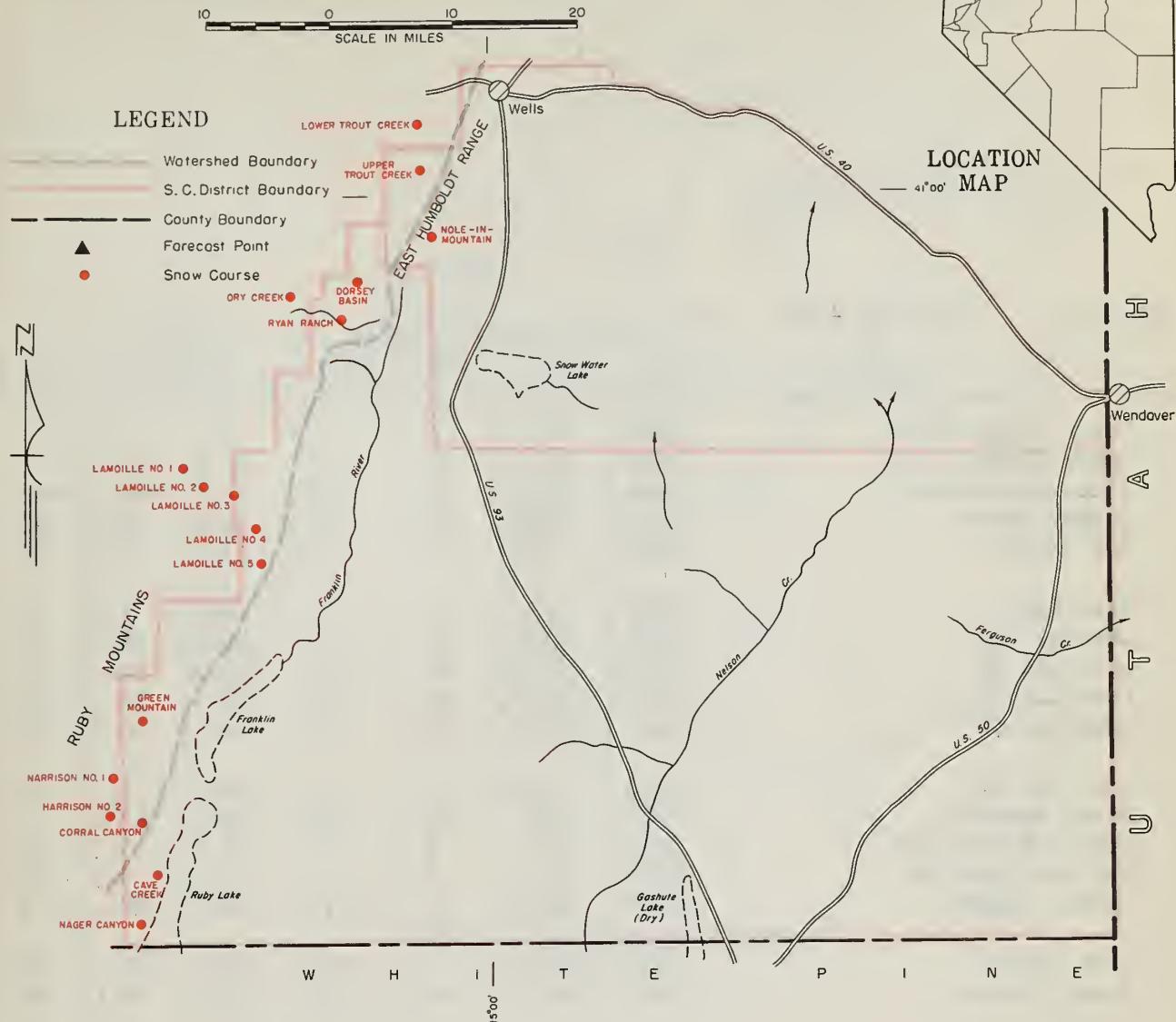
SNOW

APRIL 1, 1959

SNOW COURSE	CURRENT INFORMATION			PAST RECORD			YEARS OF RECORD
	NAME	ELEVATION	DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)	
						LAST YEAR	NORMAL
Cave Creek	7500	4/1	6	2.4	19.8	16.4	12
Hager Canyon	8000	4/1	20	6.9	25.3	21.6	12
Bird Creek	7500	3/26	T	T	6.0	5.1	5
Berry Creek	9100	3/26	38	9.9	16.4	18.5	5
Robinson Summit	7600	3/25	T	T	1.0	4.7	3
Murry Summit	7250	3/25	T	T	2.7	3.4	14
Ward Mtn. #2	8900	3/25	32	8.4	14.0	New Course	
Silver Creek #2	8000	3/30	14	3.5	6.2	New Course	
Baker Creek #3	9250	3/31	40	10.1	20.1	20.6	11
Baker Creek #2	8950	3/31	36	9.5	15.9	18.8	11
Baker Creek #1	7950	3/31	13	4.9	7.4	6.2	12
Kalamazoo Creek	7400	3/27	12	3.6	New Course		
White River #1	7400	3/25	0	0	New Course		

SNOW SURVEY & WATER SUPPLY FORECAST

CLOVER & RUBY S.C.D.'s., ELKO COUNTY, NEVADA



APRIL 1, 1959

Snow surveys on the west slope of the Ruby mountains indicate snow stored water to be about 65 percent of the 1938-52 April 1 average. Two courses at the Ruby Lake National Wildlife Refuge were the lowest on record at about 25 percent of the April 1 1938-52 average.

A new course, Hole-in-Mountain measured about one-quarter of last year's measurement. Ranchers are faced with a poor water situation with low flows in the early season to none in the late season.

Range conditions will be poor unless spring precipitation occurs.

STORAGE (1,000 Ac. Ft.)

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	NORMAL

APRIL - JULY RUNOFF (1,000 Ac. Ft.)

FORECAST POINT	FORECAST			MEASURED		
	THIS YEAR	LAST YEAR	NORMAL			

NOTE: All normals based on 1938-1952 15 year period. "Years of record" indicates number of years used in 1938 - 1952 period. The forecast period is from April 1 through July 31.

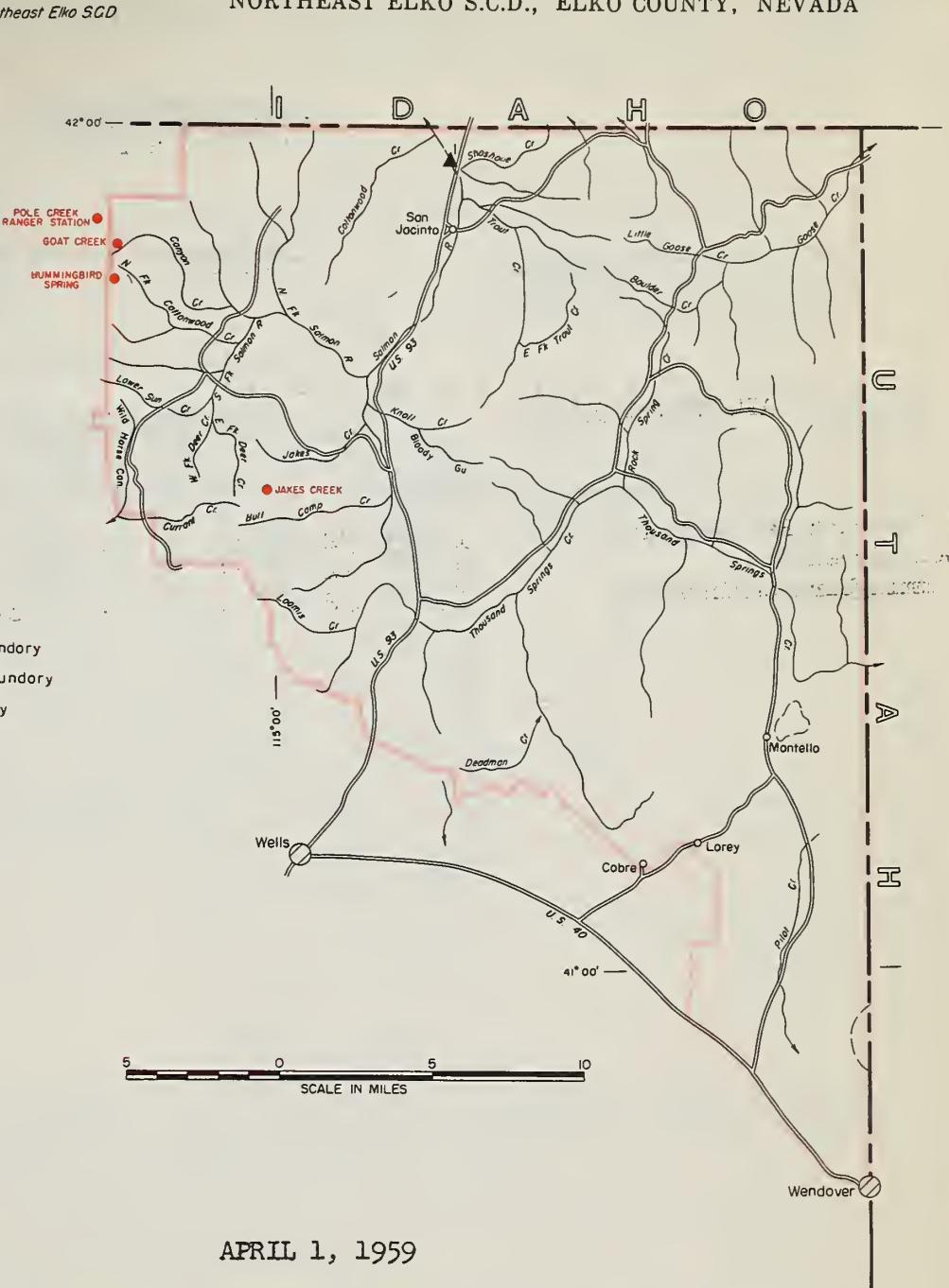
SNOW

APRIL 1, 1959

SNOW COURSE	NAME	ELEVATION	CURRENT INFORMATION			PAST RECORD		YEARS OF RECORD
			DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	LAST YEAR	NORMAL	
Lower Trout Creek		6900	4/2	T	T	9.0	3.4	7
Upper Trout Creek		8500	4/2	36	13.0	28.9	29.4	7
Hole-in-Mountain		7900	3/30	26	7.7	34.0	New Course	
Dorsey Basin		8100	3/30	30	9.4	19.5		11
Dry Creek		6500	3/30	0	0	11.5		11
Ryan Ranch		5800	3/30	0	0	2.9	1.3	11
Lamoille #5		8700	3/31	57	18.6	40.4	28.7	14
Lamoille #4		8000	3/31	41	11.9	26.2	20.0	11
Lamoille #3		7700	3/31	31	8.6	17.4	14.0	14
Lamoille #2		7300	3/31	24	7.6	16.1	10.6	14
Lamoille #1		7100	3/31	23	7.3	14.9	9.9	14
Green Mountain		8000	4/1	27	8.3	22.1	13.8	9
Harrison Pass #2		7400	4/1	4	1.3	10.6	5.7	11
Harrison Pass #1		6600	4/1	T	T	7.2	4.2	11
Corral Canyon		8500	4/3	37	11.8	28.0	20.1	9
Cave Creek		7500	4/1	6	2.4	19.8	16.5	12
Hager Canyon		8000	4/1	20	6.9	25.3	21.6	12

SNOW SURVEY & WATER SUPPLY FORECAST

NORTHEAST ELKO S.C.D., ELKO COUNTY, NEVADA



Snow surveys indicate that the runoff prospects of Salmon Falls Creek near San Jacinto is 50,000 acre feet or 54 percent of the March 1 to September 30 1938-52 normal.

Soil moisture is low and part of the snow pack will be needed to wet the soil before runoff occurs.

Range conditions should be fair if spring precipitation is near normal.

This year efficient water management will pay big dividends due to low flows in all streams.

STORAGE (1,000 Ac. Ft.)

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	NORMAL

APRIL - JULY RUNOFF (1,000 Ac. Ft.)

FORECAST POINT	FORECAST	MEASURED	
	THIS YEAR	LAST YEAR	NORMAL
Salmon Falls Creek near San Jacinto	50*	87	92
* Forecast period March 1 - Sept. 30			

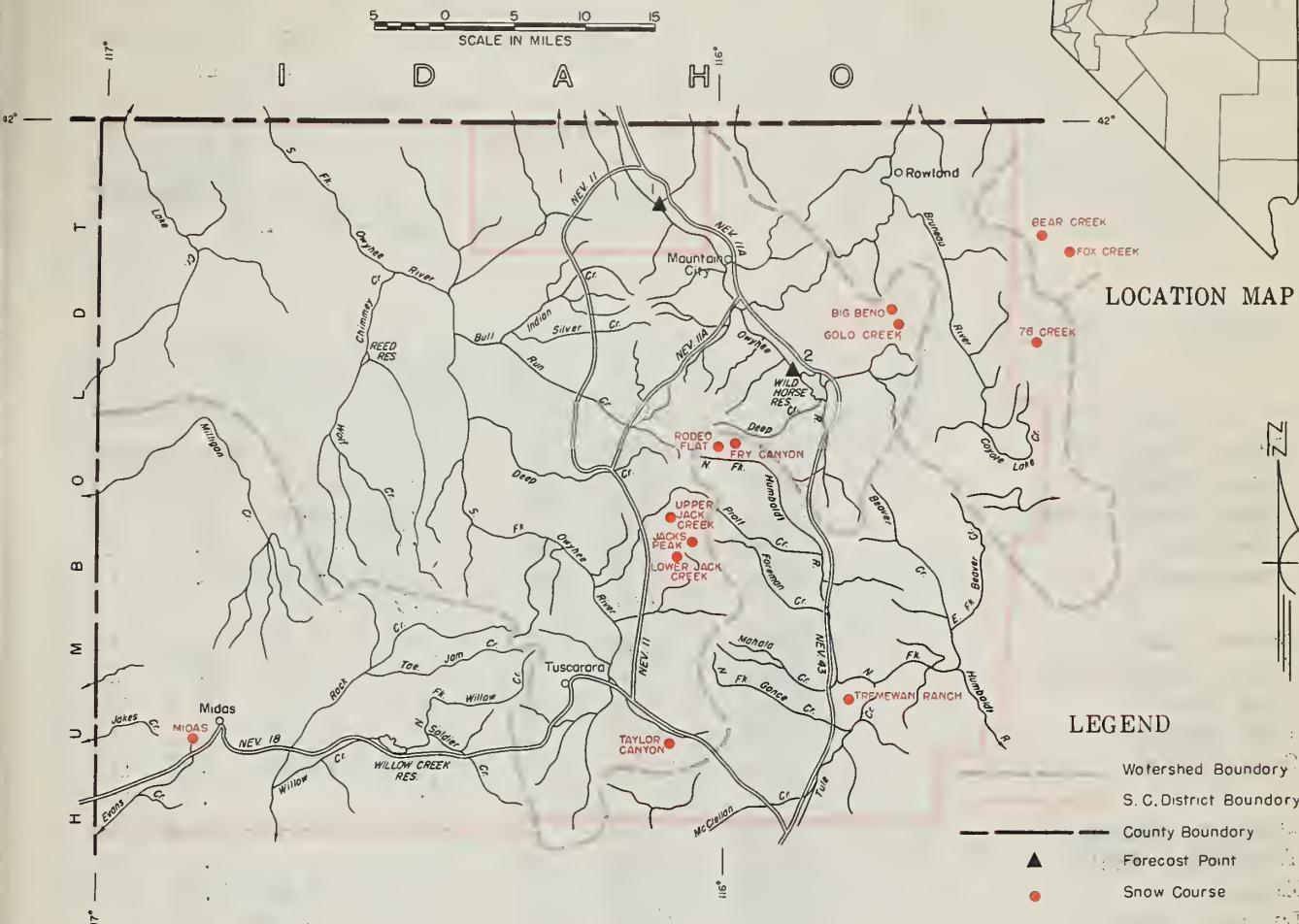
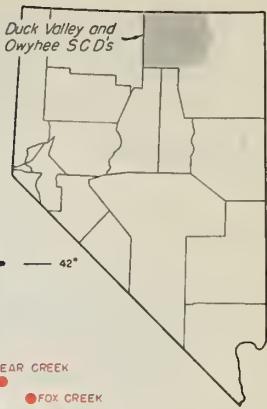
NOTE: All normals based on 1938-1952 15 year period. "Years of record" indicates number of years used in 1938 - 1952 period. The forecast period is from April 1 through July 31.

SNOW APRIL 1, 1959

SNOW COURSE	CURRENT INFORMATION			PAST RECORD		YEARS OF RECORD
	NAME	ELEVATION	DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	
Pole Creek Ranger Station	8330	3/28	48	15.9	21.4	New Course
Goat Creek	8800	3/28	43	14.2	20.2	New Course
Hummingbird Springs	8945	3/28	49	16.0	23.8	New Course

SNOW SURVEY & WATER SUPPLY FORECAST

DUCK VALLEY & Owyhee S.C.D.'s. ELKO COUNTY, NEVADA



APRIL 1, 1959

Very poor runoff is in prospect on the Owyhee River this year. April 1 surveys show most of the low elevation snow is gone with about 50 percent of the April 1 1938-52 average remaining on the higher elevation courses.

The Owyhee River near Gold Creek is forecast at 5000 acre feet or 18 percent of the April 1 through July 31 1938-52 normal flow.

Downstream at Owyhee this river is expected to flow 20,000 acre feet or 23 percent of normal.

Spring precipitation will be needed to help the range conditions. If none occurs, range conditions will be poor.

Reservoir stored water is good with Wild Horse at 23,000 acre feet or 164 percent of the April 1 1938-52 average. This reservoir is not expected to fill this year.

STORAGE (1,000 Ac. Ft.)

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	NORMAL
Wild Horse	33	23	22	14

APRIL - JULY RUNOFF (1,000 Ac. Ft.)

FORECAST POINT	FORECAST	MEASURED	
	THIS YEAR	LAST YEAR	NORMAL
1. Owyhee River near Owyhee 1/	20	110	88
2. Owyhee River near Gold Creek 1/	5	37	28
1/ Corrected for change in storage of Wild Horse Reservoir.			

NOTE: All normals based on 1938-1952 15 year period. "Years of record" indicates number of years used in 1938 - 1952 period. The forecast period is from April 1 through July 31.

SNOW APRIL 1, 1959

SNOW COURSE	NAME	ELEVATION	CURRENT INFORMATION			PAST RECORD		YEARS OF RECORD
			DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)	LAST YEAR	
Jacks Peak		8420	3/27	54	18.5	41.3	New Course	
Bear Creek		7800	3/27	52	18.8	23.4	21.8	10
Upper Jack Creek		7250	3/27	18	6.1	19.4	11.4	12
76-Creek		7100	3/25	26	7.7	-	12.5	4
Fox Creek		6800	3/27	18	5.9	12.3	8.8	13
Rodeo Flat		6800	3/26	3	0.9	16.4	9.7	12
Lower Jack Creek		6800	3/27	T	T	9.3	2.7	12
Big Bend		6700	3/26	15	5.4	15.2	10.3	15
Fry Canyon		6700	3/26	T	T	14.9	10.2	12
Gold Creek		6600	3/26	8	2.8	10.5	6.6	12
Taylor Canyon		6200	3/27	0	0	8.3	4.2	12
Tremewan Ranch		5700	3/26	0	0	T	1.1	11
Midas		7200	3/31	0	0	8.4	2.1	11
Laurel Draw		6700	3/31	12	4.8		New Course	

SNOW SURVEY & WATER SUPPLY FORECAST

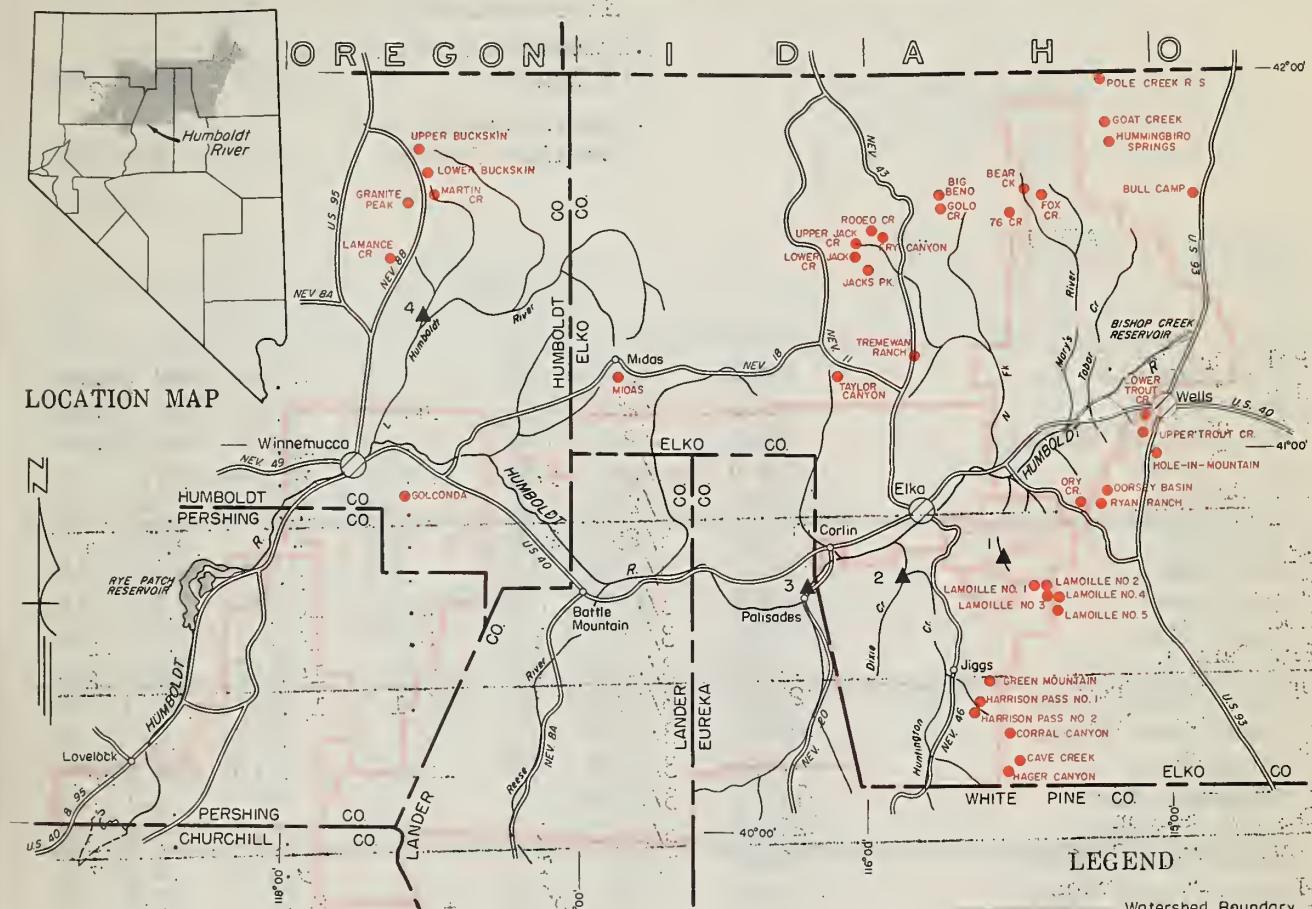
HUMBOLDT RIVER

CHURCHILL, ELKO, EUREKA, HUMBOLDT, LANDER & PERSHING COUNTIES, NEVADA

25 0 25 50 75
SCALE IN MILES



LOCATION MAP



LEGEND

- Watershed Boundary
- S. C. District Boundary
- County Boundary
- Forecast Point
- Snow Course

APRIL 1, 1959

An extremely low water year is in prospect for water users along the Humboldt River this year. Low snow pack and dry soils point to one of the lowest years of runoff on the Humboldt.

Lamoille Creek near Lamoille is forecast to flow 16,000 acre feet during the April 1 to July 31 period or 53 percent of the 1938-52 normal.

The South Fork of the Humboldt River near Elko is forecast at 22,000 acre feet or 26 percent of normal flow.

The Humboldt River at Palisade is being forecast at 30,000 acre feet or 12 percent of the 1938-52 April through July normal.

Fortunately Rye Patch Reservoir on the lower Humboldt now contains 123,000 acre feet or 123 percent of the April 1, 1938-52 normal. Lovelock Valley will have fair water supplies this year.

Plate 12

(Over)

STORAGE (1,000 Ac. Ft.)

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	NORMAL
Rye Patch	179	123	100	100

APRIL - JULY RUNOFF (1,000 Ac. Ft.)

FORECAST POINT	FORECAST	MEASURED	
	THIS YEAR	LAST YEAR	NORMAL
1. Lamoille Creek near Lamoille	16	30	30
2. So. Fork Humboldt River near Elko	22	77	84
3. Humboldt River at Palisade	30	228	249
4. Martin Creek near Paradise Valley	10	30	18

NOTE: All normals based on 1938-1952 15 year period. "Years of record" indicates number of years used in 1938 - 1952 period. The forecast period is from April 1 through July 31.

SNOW APRIL 1, 1959

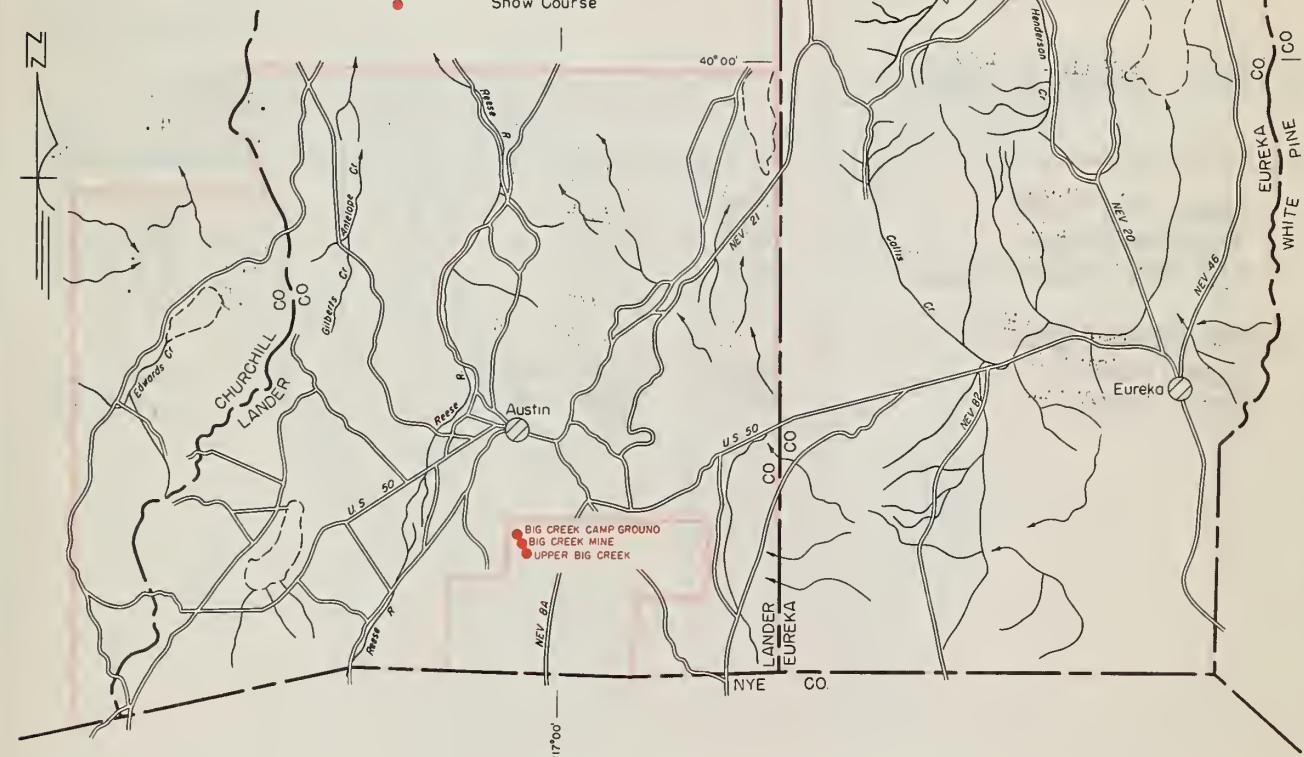
SNOW COURSE	NAME	ELEVATION	CURRENT INFORMATION			PAST RECORD		YEARS OF RECORD
			DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)	LAST YEAR	
Pole Creek R. S.		8330	3/28	48	15.9	21.4	New Course	
Goat Creek		8800	3/28	43	14.2	20.2	New Course	
Hummingbird Springs		8945	3/28	49	16.0	23.8	New Course	
Bear Creek		7800	3/27	52	18.8	23.4	21.8	10
Fox Creek		6800	3/27	18	5.9	12.3	8.8	13
76-Creek		7100	3/25	26	7.7	-	12.5	4
Big Bend		6700	3/26	15	5.4	15.2	10.3	15
Gold Creek		6600	3/26	8	2.8	10.5	7.0	12
Rodeo Flat		6800	3/26	3	0.9	16.4	9.7	12
Fry Canyon		6700	3/26	T	T	14.9	10.2	12
Upper Jack Creek		7250	3/27	18	6.1	19.4	11.4	12
Lower Jack Creek		6800	3/27	T	T	9.3	2.7	12
Jacks Peak		8420	3/27	54	18.5	41.3	New Course	
Tremewan Ranch		5700	3/26	0	0	T	1.1	11
Taylor Canyon		6200	3/27	0	0	8.3	4.2	12
Lower Trout Creek		6900	4/2	T	T	9.0	3.4	7
Upper Trout Creek		8500	4/2	36	13.0	28.9	29.4	7
Hole-in-Mountain		7900	3/30	26	7.7	34.0	New Course	
Dorsey Basin		8100	3/30	30	9.4	19.5	16.4	11
Ryan Ranch		5800	3/30	0	0	2.9	1.3	11
Dry Creek		6500	3/30	0	0	11.5	4.8	11
Lamoille #5		8700	3/31	57	18.6	40.4	28.7	14
Lamoille #4		8000	3/31	41	11.9	26.2	20.0	11
Lamoille #3		7700	3/31	31	8.6	17.4	14.0	14
Lamoille #2		7300	3/31	24	7.6	16.1	10.6	14
Lamoille #1		7100	3/31	23	7.3	14.9	9.9	14
Green Mountain		8000	4/1	27	8.3	22.1	13.8	9
Harrison Pass #1		6600	4/1	T	T	7.2	4.2	11
Harrison Pass #2		7400	4/1	4	1.3	10.6	5.7	11
Corral Canyon		8500	4/3	37	11.8	28.0	20.1	9
Cave Creek		7500	4/1	6	2.4	19.8	16.5	12
Hager Canyon		8000	4/1	20	6.9	25.3	21.6	12
Midas		7200	3/31	0	0	8.4	2.1	11
Golconda #2		6000	3/31	T	T	6.9	New Course	
Upper Buckskin		7200	4/1	19	7.4	21.0	10.5	14
Lower Buckskin		6700	4/1	15	5.9	14.0	6.7	11
Martin Creek		6700	4/1	20	7.7	14.2	8.2	11
Granite Peak		7800	4/2	31	10.9	-	11.8	11
Lamance Creek		6000	4/2	9	4.0	-	9.8	8

SNOW SURVEY & WATER SUPPLY FORECAST

AUSTIN & EUREKA S.C.D.'S., CHURCHILL, EUREKA
& LANDERS COUNTIES, NEVADA



LOCATION MAP



APRIL 1, 1959

On the Toiyabe Mountain range south of Austin, the snow pack is extremely light this year. The April 1 snow survey measurements are less than 20 percent of the 1938-52 normal.

Consequently, early season streamflow will be low and late season supplies very poor. The present snow pack is melting very rapidly. March storms added little to the snow pack. On the Upper Big Creek snow course (elevation 8000 feet), the increase during March was only 0.7 inches of water.

Range feed will be entirely dependent on rains during spring and summer months.

Close supervision of irrigation water will be required to make best use of it.

(Over)

STORAGE (1,000 Ac. Ft.)

APRIL - JULY RUNOFF (1,000 Ac. Ft.)

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	NORMAL

FORECAST POINT	FORECAST		MEASURED	
	THIS YEAR	LAST YEAR	NORMAL	

NOTE: All normals based on 1938-1952 15 year period. "Years of record" indicates number of years used in 1938 - 1952 period. The forecast period is from April 1 through July 31.

SNOW APRIL 1, 1959

SNOW COURSE	CURRENT INFORMATION			PAST RECORD		YEARS OF RECORD	
	NAME	ELEVATION	DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)		
					LAST YEAR	NORMAL	
Upper Big Creek	8000	3/31	5	1.7	11.1	8.9	13
Big Creek Mine	7600	3/31	0	0	6.5	4.0	13
Big Creek Camp Ground	6600	3/31	0	0	T	2.1	15
UPPER REESE RIVER							
Upper Corral	8500	3/27	T	T	9.4	5.0	13
Lower Corral	7500	3/27	T	T	1.5	1.7	13



SNOW SURVEY & WATER SUPPLY FORECAST

PARADISE VALLEY & QUINN RIVER S.C.D.'S., HUMBOLDT COUNTY, NEVADA

10 0 10 20
SCALE IN MILES

LEGEND

Watershed Boundary

S. C. District Boundary

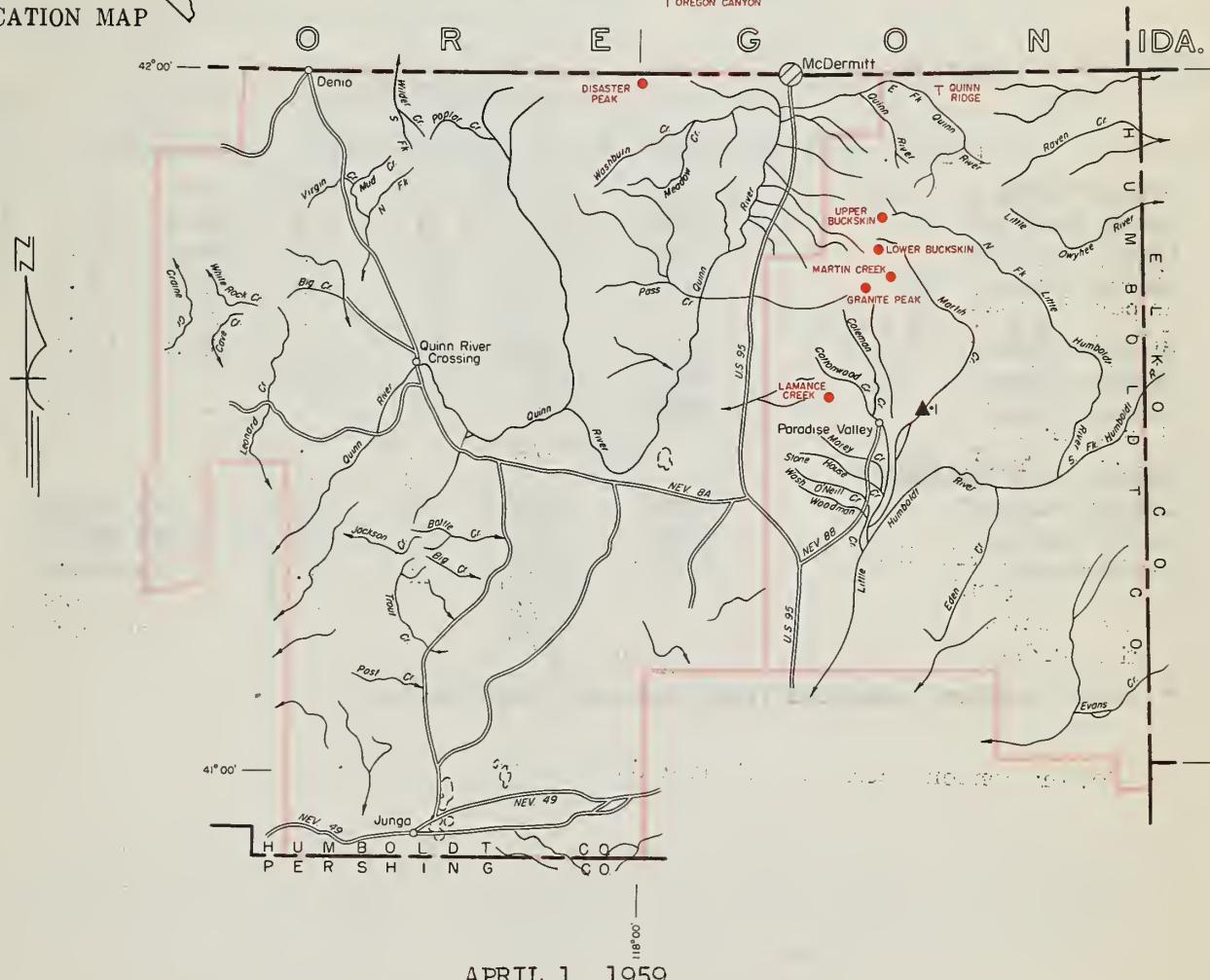
County Boundary

Forecast Point

Snow Course

Aerial Snow Depth Gage

LOCATION MAP



APRIL 1, 1959

Paradise Valley Soil Conservation District can expect a poor water supply this year. Martin Creek is forecast to flow 10,000 acre feet during the April 1 July 31 period. This represents 56 percent of the 1938-52 15 year normal.

Other creeks coming from the Santa Rosa Mountains can be expected to have flows similar to Martin Creek. Streams will have low peaks and reduce to low flows early in the summer.

Dry soils will take some of the snow pack before runoff occurs and spring rains will be needed to produce range feed.

Close supervision of irrigation water will be required to get the best results from the limited supplies.

STORAGE (1,000 Ac. Ft.)

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	NORMAL
Rye Patch	179	123	100	100

NOTE: All normals based on 1938-1952 15 year period. "Years of record" indicates number of years used in 1938 - 1952 period. The forecast period is from April 1 through July 31.

APRIL - JULY RUNOFF (1,000 Ac. Ft.)

FORECAST POINT	FORECAST	MEASURED	
	THIS YEAR	LAST YEAR	NORMAL
Martin Creek near Paradise Valley	10	30	18
Humboldt River at Palisade	30	228	249

SNOW

APRIL 1, 1959

SNOW COURSE	CURRENT INFORMATION			PAST RECORD			YEARS OF RECORD
	NAME	ELEVATION	DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)	
						LAST YEAR	NORMAL
Granite Peak	7800	4/2	31	10.9	-	11.8	11
Upper Buckskin	7200	4/1	19	7.4	21.0	10.5	14
Lower Buckskin	6700	4/1	15	5.9	14.0	8.7	11
Martin Creek	6700	4/1	20	7.7	14.2	8.2	11
Disaster Peak	6500	3/29	19	7.5	18.3	17.2	8
Lamance Creek	6000	4/2	9	4.0	-	9.8	8
Leonard Creek	5900	4/1	0	0	-	-	-
AERIAL SNOW MARKERS							
Oregon Canyon*	7240	3/27	12	4.1	New Marker		
Louse Canyon	6440	4/2	0	0	New Marker		
Quinn Ridge	6300	3/27	0	0	New Marker		

* Water content computed from adjacent snow courses.

SNOW SURVEY & WATER SUPPLY FORECAST

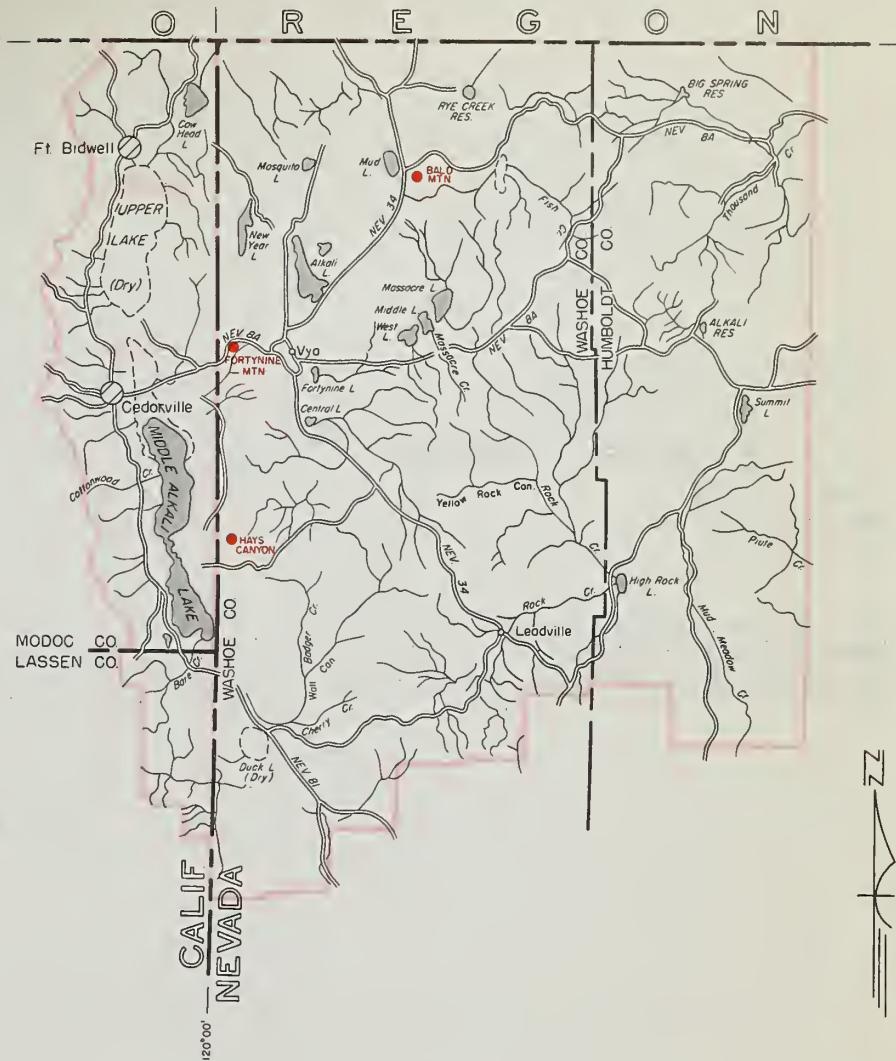
VYA S.C.D., NEVADA and
SURPRISE VALLEY S.C.D., CALIFORNIA



LEGEND

- Watershed Boundary
- S. C. District Boundary
- County Boundary
- ▲ Forecast Point
- Snow Course

8 0 8 16
SCALE IN MILES



APRIL 1, 1959

Water supply prospects for Vya and Surprise Valley Soil Conservation Districts are extremely poor this spring. The Bald Mountain snow course on the Sheldon Antelope Refuge is 36 percent of the April 1 normal. Hays Canyon and 49-Mtn snow courses were bare of snow. Mountain soils are damp on top but dry lower down. Unless spring rains occur, range prospects are poor.

In Surprise Valley, precipitation during March at Fort Bidwell and Cedarville has been about one-third of normal. In the Warner Mountains, 3 snow courses indicate light snow pack. Cedar Pass snow course is 42 percent of the April 1 15 year normal. Mountain soils beneath the snow pack are reported as moderately wet but because of the light snow pack natural streamflow will drop off much earlier than usual this year.

(Over)

Plate 15

STORAGE (1,000 Ac. Ft.)

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	NORMAL

APRIL - JULY RUNOFF (1,000 Ac. Ft.)

FORECAST POINT	FORECAST			MEASURED		
	THIS YEAR	LAST YEAR	NORMAL	THIS YEAR	LAST YEAR	NORMAL

NOTE: All normals based on 1938-1952 15 year period. "Years of record" indicates number of years used in 1938 - 1952 period. The forecast period is from April 1 through July 31.

SNOW APRIL 1, 1959

SNOW COURSE	CURRENT INFORMATION			PAST RECORD			YEARS OF RECORD
	NAME	ELEVATION	DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)	
						LAST YEAR	NORMAL
Bald Mountain	6720	3/31	2	1.2	8.1	3.3	13
Hays Canyon	6400	3/30	0	0	6.2	New Course	
49-Mtn	6000	3/30	0	0	5.9	New Course	
Cedar Pass (Calif.)	7100	3/31	.22	7.9	24.8	19.0	15
Barber Creek (Calif.)	6500	3/31	15	5.8	17.7	New Course	
Reservation Creek (Calif.)	5900	3/31	14	5.7	16.9	New Course	

Agencies Cooperating in Collecting Data Contained in this Bulletin

FEDERAL

Soil Conservation Service
Forest Service
Geological Survey
Bureau of Reclamation
Fish and Wildlife Service
Army
Navy
Weather Bureau
Agricultural Research Service

STATE

Nevada Department of Conservation & Natural Resources
Nevada State Engineer
Nevada State Forester-Firewarden
Nevada Cooperative Snow Surveys
Colorado River Commission of Nevada
California Cooperative Snow Surveys
California Department of Water Resources
Oregon Cooperative Snow Surveys
Nevada Association of Soil Conservation Districts

PRIVATE

Walker River Irrigation District
Amalgamated Sugar Company
Owyhee Project North Board of Control
Owyhee Project South Board of Control
Virginia City Water Company
Kennecott Copper Corporation
Squaw Valley Development Company
Pacific Gas & Electric Company
Nevada Irrigation District
Sierra Pacific Power Company
Washoe County Water Conservation District
Truckee-Carson Irrigation District
Pershing County Water Conservation District

Other organizations and individuals furnish valuable
information for the snow survey reports. Their
Cooperation is gratefully acknowledged.

Federal - State - Private
COOPERATIVE SNOW SURVEYS

—
Furnishes the basic data
necessary for forecasting
water supply for irrigation,
domestic and municipal water
supply, hydro-electric power
generation, navigation,
mining and industry

—
*“The Conservation of Water begins
with the Snow Survey”*